Dec. 7 '50

# Public Utilities

## FORTNIGHTLY

Volume XLVI No. 12 December 7, 1950

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*By Elmer K. Nelson*

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Utility Rate Fixing by Labor Arbiters?
*By Hawley S. Simpson*

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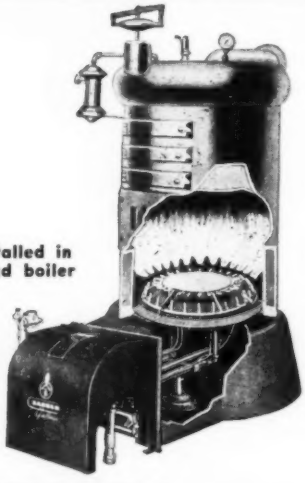
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*By A. Bryan Marvin*

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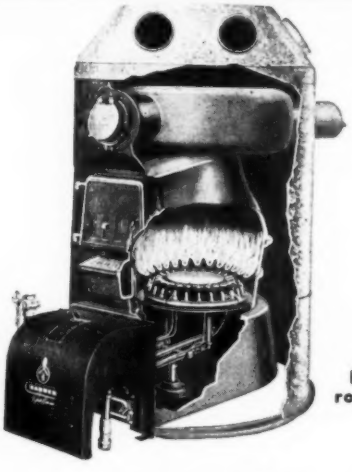
Building Load with a Bunch of Cards
*By James H. Collins*

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Installed in round furnace

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# Public Utilities FORTNIGHTLY

VOLUME XLVI DECEMBER 7, 1950 NUMBER 12

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# Pages with the Editors

EARLY this year, a series of articles appeared in our contemporary, *American Forests,* the magazine of the American Forestry Association, in which the problem of sedimentation at our big public dam reservoirs was approached from the engineering point of view. The general conclusion of these articles was to the effect that unless piecemeal planning in watershed conservation is stopped, some of these gigantic structures, built at prodigious cost to American taxpayers, will stand one day as useless monoliths, symbolizing an incredible faith in an engineering approach that failed to solve our watershed problems.

THE answer to this problem of sedimentation is to stop putting the cart before the horse in watershed conservation. The application of sound practices on the watersheds with practical engineering methods can still do a lot to avert the possibility that the American taxpayers may be financing projects which could one day become as useless as the Pyramid of Cheops.

IT probably would not be unfair to say that a good many men now in Congress who have voted on public dam projects to the tune of millions and millions of taxpayers' dollars have not had the sedimentation problem brought to their attention in such a way as to make them give it serious thought. One Congressman of our acquaintance, in casual conversation, confessed that he thought silting and desilting of river dam reservoirs was a routine maintenance operation—something comparable with scrubbing the rings around the family bathtub.

PREVENTIVE measures to slow down the rate of sedimentation have not been aired to any great extent in congressional debate. And yet we do know that much can be done to correct sedimentation. More important, scientific engineers have shown that a good deal *cannot* be done, in a practical way. Here, then,



*Underwood & Underwood*
HAWLEY S. SIMPSON

is the obvious target for intensive research and appraisal.

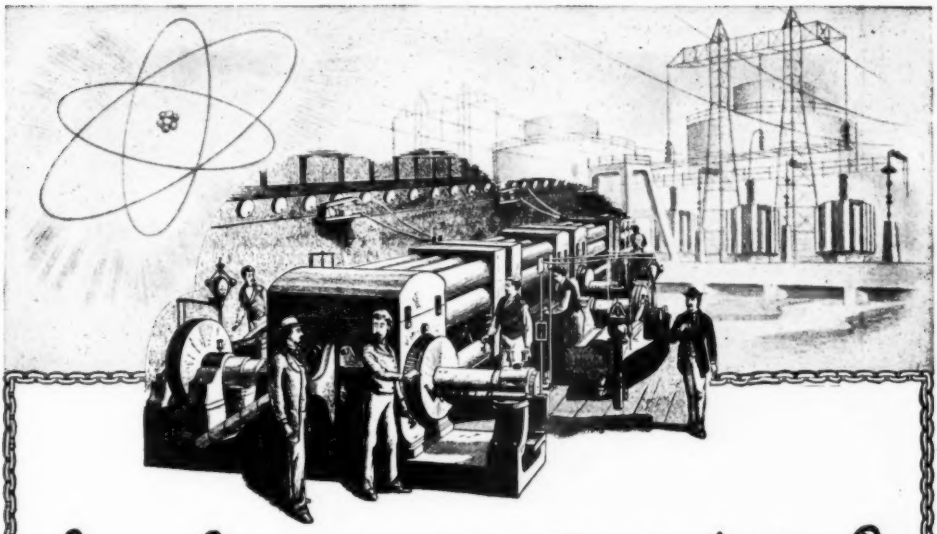
ONE of the surprising things which some of our later-day conservationists may learn, from such studies, is that sedimentation is in many ways not only inevitable but positively a constructive force—nature's way of building and rebuilding the valleys through which our rivers flow. Nor is there any short and easy answer, no ready-made villain, no clean-cut reform.

To consider some types of conservation propaganda, one would think that sedimentation and land erosion are something which only began to happen in this country during recent decades. The dust bowl disaster of the mid-thirties has been laid to careless farming, overgrazing, reckless timbering, and other human frailties and capitalistic greed. But real students of the problem know that the wind-borne soil and sedimentation are as old as the bare rocks of the Dakota badlands.

IN this issue, we present a calm engineering appraisal of this over-all problem



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# Is your financing program attuned to the times?

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in the form of an article by ELMER K. NELSON, civil engineer, consultant to the United States Senate Committee on Interior and Insular Affairs—a post he has held since 1946. Educated at the Universities of Nebraska and Wyoming (BS in engineering), MR. NELSON has had practical experience in hydrology problems relating to municipal and irrigation uses in the Rocky mountain region. He was for many years consultant to the state of Wyoming on interstate streams in connection with state compacts and watershed litigation. He is a member of the American Society of Civil Engineers.

* * * *

DURING the past three or four years over a dozen states have placed upon their statute books so-called public utility antistrike laws. Many of these feature compulsory arbitration provisions in varying degree. How are they likely to work out?

IN this issue, beginning page 804, HAWLEY S. SIMPSON, noted transit engineer, gives us the advantage of his research into the experience of the transit industry with arbitration. The conclusion he reaches is hardly an endorsement for arbitration as a standard procedure for disposing of wage disputes. More important, from the standpoint of MR. SIMPSON'S analysis, is the impact of utility wage arbitration on the rate-making functions. All signs point to the conclusion that public utility industries in the United States are on the threshold of an era in labor relations in which boards of arbitration will be more frequently called upon to make decisions of far-reaching magnitude. Whether expediency will ultimately dictate these decisions, or whether they will be reached in a quasi judicial manner, depends, to a very considerable extent, upon the industry's attitude.

MR. SIMPSON, author of this article on wage arbitration in the transit industry, is a graduate of the University of Michigan (BSCE), who has been a research engineer for the American Transit Association since 1929. He has written for numerous periodicals and has given much of his attention to the engineering and human relations problems of mass transportation. He is currently a member of the nationally known Philadelphia firm of engineers, Simpson & Curtin.



A. BRYAN MARVIN

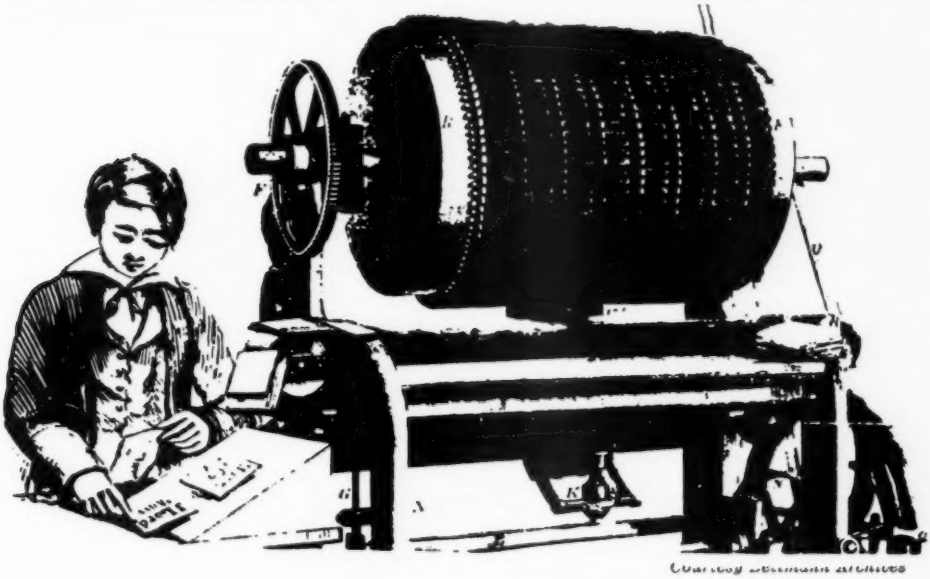
* * * *

UTILITIES must use the surface or undersurface of city streets for their distribution network. The companies, however, are not guaranteed that a certain area, above or below the paving, is their permanent domain. New construction frequently requires extensive and expensive changes. In his article, entitled "Nothing Can Stop Utility Service," beginning on page 811, A. BRYAN MARVIN, of the Consolidated Edison Company of New York, Inc., uses the recent construction of the new United Nations' headquarters and the Brooklyn Battery tunnel as case material to demonstrate ticklish tasks confronting the utility, in relocating distribution facilities without interrupting service.

EDUCATED at St. Mark's and Yale, MR. MARVIN found his way into the utility industry after a 2-year stint as a newspaper reporter for the *Stamford* (Connecticut) *Advocate*.

THE next number of this magazine will be out December 21st.

*The Editors*



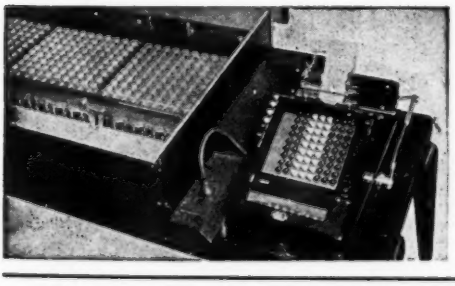
Courtesy Bettmann Archives

# Rolling out work in ½ the time

IT seems to be an ingrained American characteristic to constantly seek a better, more efficient way of turning out routine work.

Here, for example, is one of the first addressing machines. It was invented in 1858 by an office boy who got mighty tired of writing labels by hand.

Another case in point is this modern machine which has been especially devised for public utilities' use. Up until a few years ago, the job of grouping consumers' bills for usage data was very tedious. The routine consumed hours of a clerical staff's time, and it was costly to management.



Now, however, the Bill Frequency Analyzer, shown below, can do the work in ½ the time. It can analyze as many as 200,000 bills in one day. The final cost to the utility, too, is halved.

Wouldn't you like to know more about this Recording and Statistical Corporation service which can help give you an accurate picture of your consumers' usage situation in a few days' time?

**Send for FREE booklet**

"The One Step Method of Bill Analysis" tells more about this accurate and economical method of compiling consumers' usage data. Write today.

**Recording and Statistical Corporation**

**100 Sixth Avenue, New York 13, N. Y.**

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# Coming IN THE NEXT ISSUE

★

***Public Relations Begin with the Housewife***

A United States Senator, who has a rich background of personal as well as legislative experience with gas industry affairs, gives some sage advice on the need for cultivating the good will and understanding of the American housewife. It is based on the homely philosophy that when an American woman is educated, a family is educated. Senator Robert S. Kerr, Democrat of Oklahoma, author of the famous Kerr Bill which passed the 81st Congress but was blocked by presidential veto, has been looking on the human side of gas industry public relations.

***Employee Cooperation versus the Rule Book***

A review of practical steps taken by one utility company in the Southwest to cement relations with its employees and their chosen bargaining union. John T. Kimball, vice president of Central Arizona Light & Power Company, sketches the details of how a cordial and practical plan for coöperation has been worked out.

***How Will We Keep the REA Co-ops Down on the Farm?***

The problems presented by REA's so-called "super co-op" program are likely to come in for a fair share of attention in the 82nd Congress. Representative Boyd Tackett, Arkansas Democrat, and long-time friend of REA, has written a thoughtful analysis of REA's practice of making large loans to nonoperating coöperatives for generating and transmission lines to be turned over to other Federal agencies on a lease basis. Do such loans represent a departure from the original intent of Congress? Or do they promote rural electrification at this phase of its development?

***He Watched the Clouds Roll by***

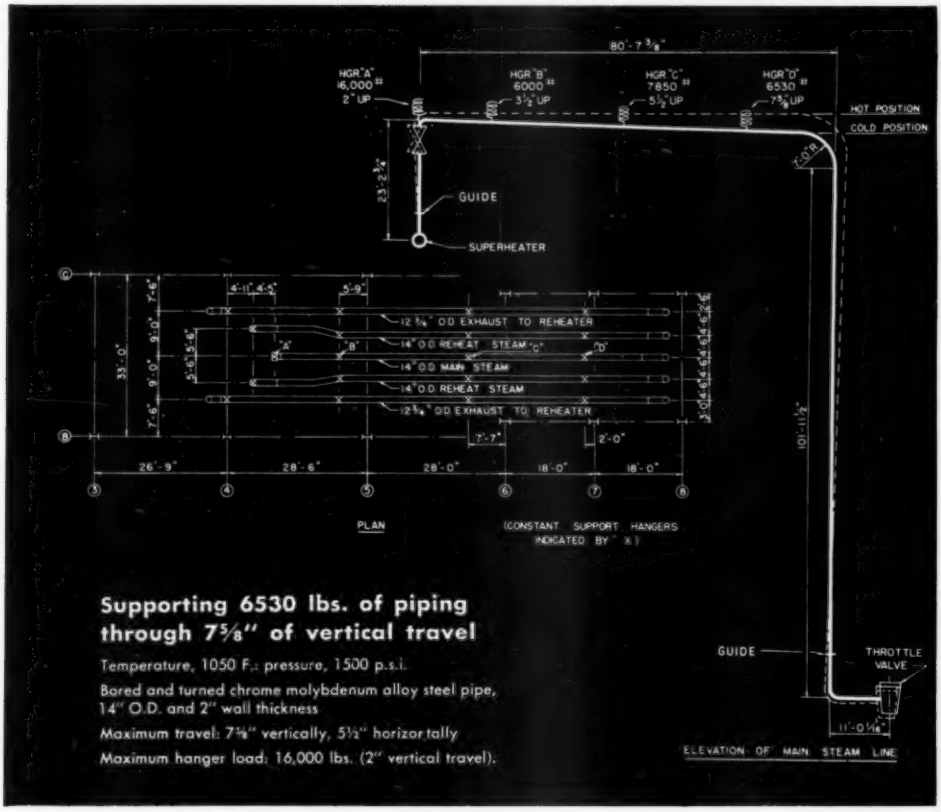
Less than a half-century ago a familiar figure sitting on the roof of electric power stations in New York city and elsewhere was the "weather watcher." John P. Callahan, utility news writer of **The New York Times,** gives us an interesting historical vignette describing the colorful figure who once played an important part in day-to-day electric utility operations.

★

Also . . . ***Special financial news, digests, and interpretations of court and commission decisions, general news happenings, reviews, Washington gossip, and other features of interest to public utility regulators, companies, executives, financial experts, employees, investors, and others.***



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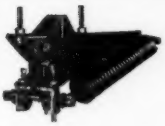
Temperature, 1050 F.; pressure, 1500 p.s.i.

Bored and turned chrome molybdenum alloy steel pipe, 14" O.D. and 2" wall thickness

Maximum travel: 7⅜" vertically, 5½" horizontally

Maximum hanger load: 16,000 lbs. (2" vertical travel).

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Believing that a good piping job is too important to be jeopardized by improvised or inadequate pipe hangers, Grinnell has developed a complete line of stock hangers and supports for every piping need from a simple water pipe to a high pressure, high temperature steam line. Write for Catalog 10-D.

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# Remarkable Remarks

*"There never was in the world two opinions alike."*
—MONTAIGNE

MALCOLM F. McNAIR
*Professor of retailing, Harvard Graduate School of Business Administration.*

"It begins to look as if success in business is getting to be illegal and government really emerges today as one of the chief enemies of competition. Specifically, the question now is looming up as to whether bigness is in itself illegal."

LESLIE R. GROVES
*Vice president, Remington Rand, Inc.*

"I do not like to think of the future of our country being at the mercy of the mental capacity and integrity of any of the so-called bright, young intellectuals who have become so powerful in Washington in the last two decades."

WINSTON CHURCHILL
*Ex-Prime Minister, Great Britain.*

"[Socialism is] the weakest of all bulwarks against Communism. They [the Socialists] lead people up the garden path to the brink of the precipice and then turn round and say, as they tumble over, 'We are very sorry; we never meant to go so far.'"

*Excerpt from advertisement, Institute of Life Insurance.*

"To protect the value of the dollar, we must make sure that our government isn't called upon to tax, borrow, or spend a single cent for things that are *unnecessary* at this time. And certainly unnecessary spending by *anybody*, including government, has absolutely no excuse in times like these."

F. RAYMOND PETERSON
*President, American Bankers Association.*

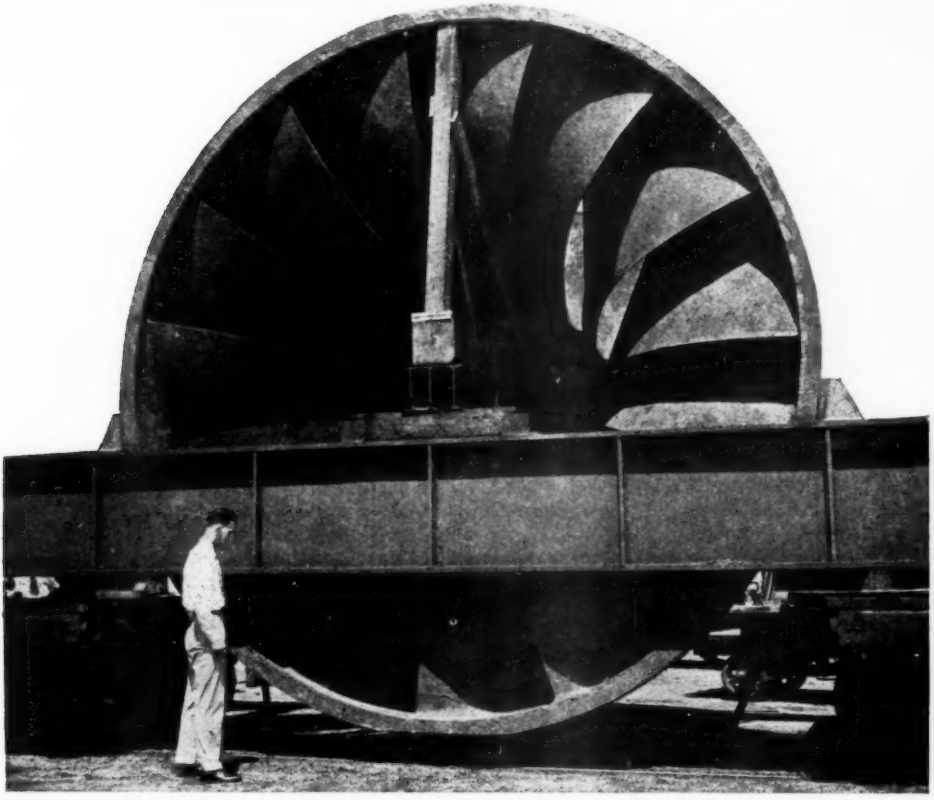
"Inherent in our rôle as providers of real estate credit is a responsibility on our part to assume risk and to hold it until it has been liquidated. That is the real economic reason for our existence as lenders . . . if government assumes the risk, its reward is the growth of its power. That is the essence of statism. It is also the death knell of the enterprise system and of the institutions which are part of that system."

HENRY H. HEIMANN
*Executive manager, National Association of Credit Men.*

"The proposal that an excess profits tax is necessary to recapture high earnings from producers of war materials seems to overlook the possibility of eliminating the profits of many companies not engaged in the preparedness effort. The idea that an excess profits tax will check inflation is open to debate, as such a tax brings on extravagance and high overhead burdens which will extend over into peacetime production."



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# FACILITIES FOR THE SMALLEST OR THE LARGEST

The 225-acre Newport News plant includes plate steel and machine shops equipped with a complete variety of tools to fabricate items of water power equipment of any size. Contracts received by Newport News for hydraulic turbines with an aggregate rated output in excess of 7,000,000 horsepower have included units as high as 165,000 horsepower and as low as 500 horsepower.

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*Partner, Lehman Brothers.*

"It will take more than guns and ammunition to stop the rising tide of Communism. Economic preparedness must go hand in hand with military preparedness."

ARCH N. BOOTH
*Executive vice president, Chamber of Commerce of the United States.*

"Intelligent business participation in public affairs will broaden our government's representative and responsible character. If we as citizens fail to do our duty in national affairs we can be sure that power-hungry politicians will run the show."

*Excerpt from monthly letter published by National City Bank.*

"One hears much these days about closing 'tax loopholes' but not enough about closing 'expenditure loopholes'—especially where such spending has pronounced inflationary effects, as in the case of public works, subsidies to promote building, and high support prices for farm products."

SUMNER SLICHTER
*Economist.*

"Collective bargaining has recently been showing itself to be a device by which powerful and aggressive groups of employees protect themselves from sharing in the drop in the standard of living that the increased production for defense and foreign aid will soon impose on the country as a whole."

MERRYLE S. RUKEYSER
*Columnist.*

"In order to be strong henceforth, it is desirable to begin to think straight. The orgies of governmental handouts not only deteriorated governmental strength, but also tended to impair the fiber of young people. Survival in a hard-boiled world inheres in a rebirth of faith in American principles of self-reliance and individual merit."

GEORGE E. SOKOLSKY
*Columnist.*

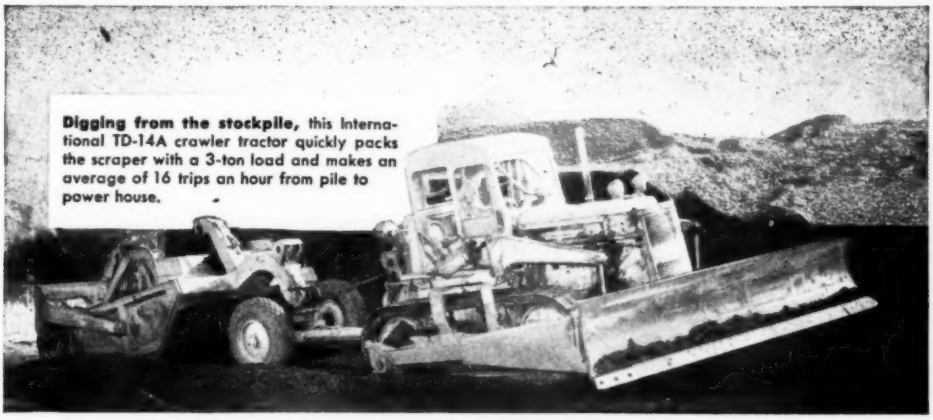
"A government, like an individual, often overextends and then discovers bankruptcy; there is no RFC to bail out the bankrupt government on the plea that it will make work. If the people object to more and higher taxes, they must oppose the welfare state. If they like the welfare state, they must agree to more and higher taxes every year until they work largely to pay taxes. It is as easy as that."

DONALD R. RICHBERG
*Lawyer.*

"It is the patter of every politician and the chatter of every social and business gathering that we, as a people, are so devoted to our liberties that we fear nothing from Communism but forceful aggression. And yet, in our demand for security and peace, we have adopted the fundamental dogma of Communism, which is that security and peace are to be obtained by control of government and by the use of government force to impose a politically ordained morality upon a submissive people."



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**Digging from the stockpile,** this International TD-14A crawler tractor quickly packs the scraper with a 3-ton load and makes an average of 16 trips an hour from pile to power house.

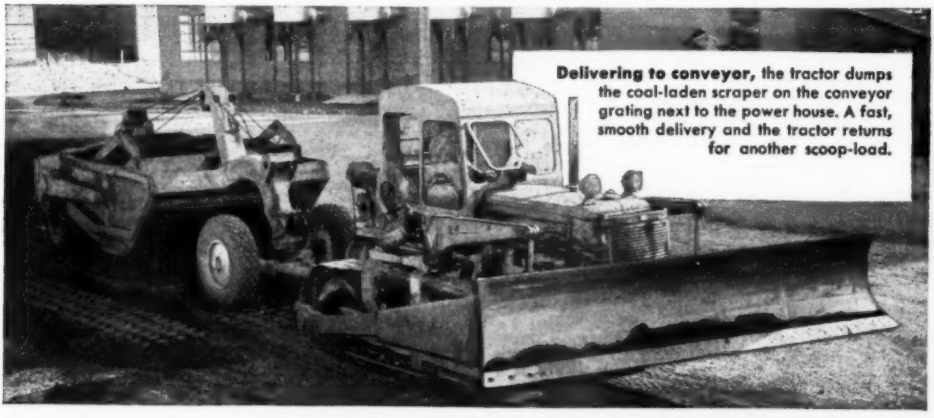
# VITAL LINK in the chain of power

An important Michigan power company* depends on an International TD-14A crawler tractor and matched 'dozer and scraper to keep coal flowing in a steady stream from stockpile to power house. Three tons a trip is the normal load over a 500-foot haul and round trip time is about three minutes. The TD-14A also builds and maintains the stockpile.

Here is a vital link in the chain that converts coal into electric energy. It must be extremely dependable and highly efficient. That's why more and more public utilities are using International Crawlers for coal handling power. See your International Industrial Power Distributor for tractors and equipment.

**INTERNATIONAL HARVESTER COMPANY**
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**Delivering to conveyor,** the tractor dumps the coal-laden scraper on the conveyor grating next to the power house. A fast, smooth delivery and the tractor returns for another scoop-load.

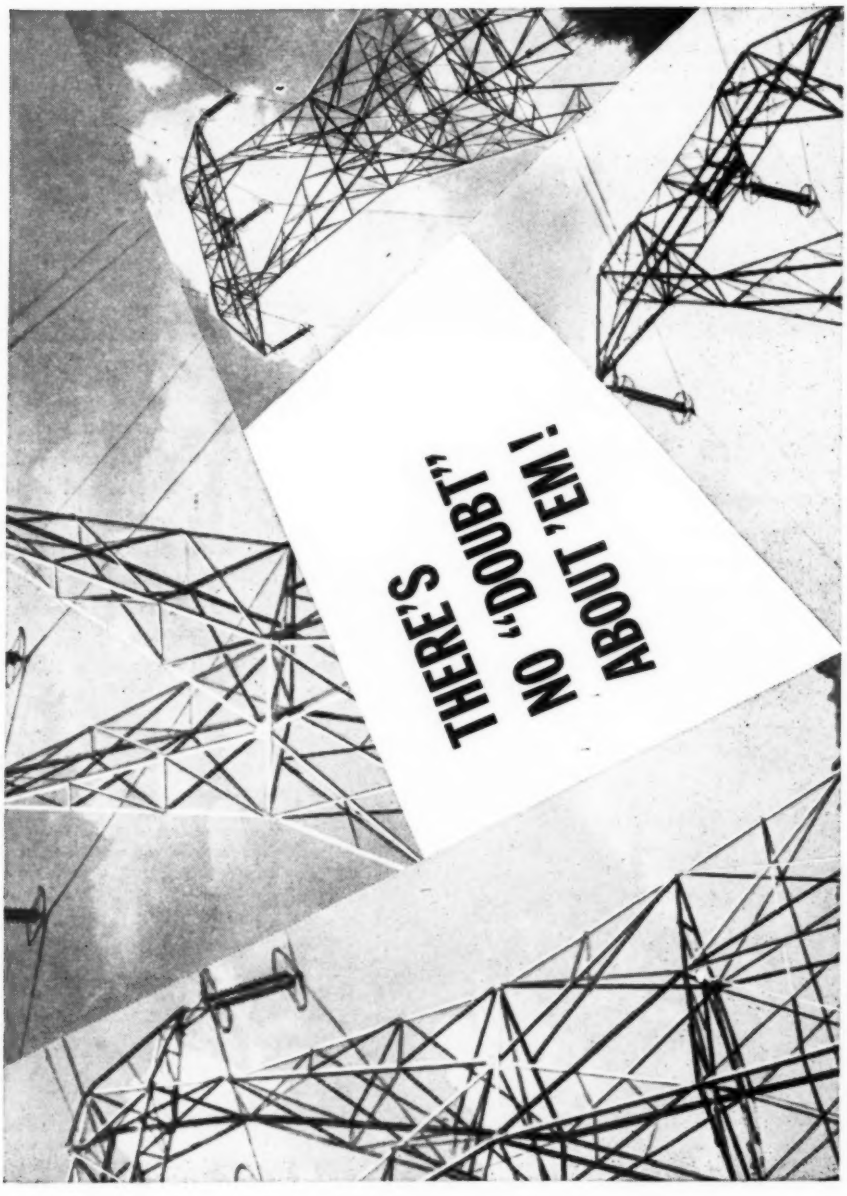
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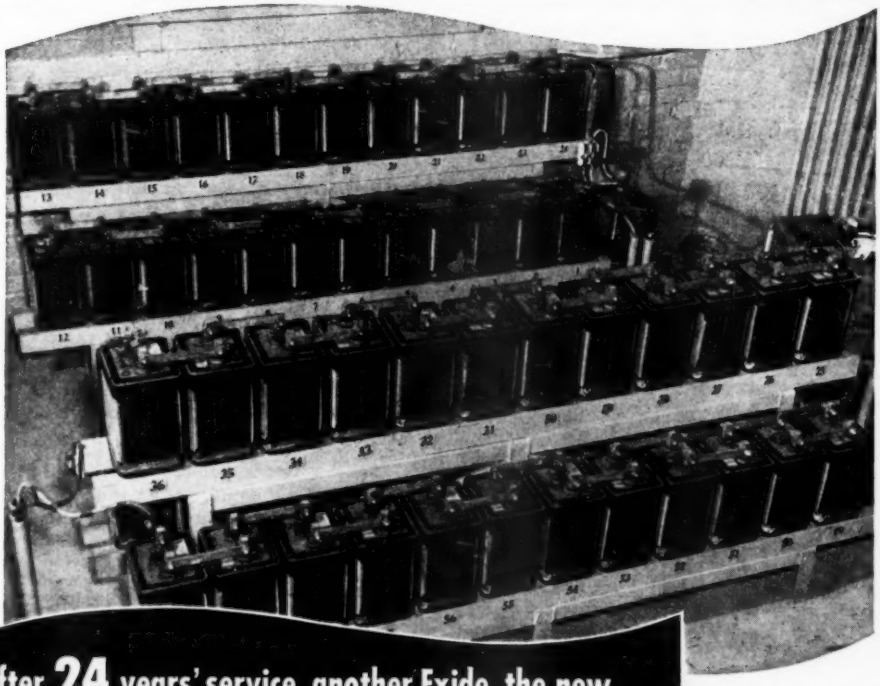
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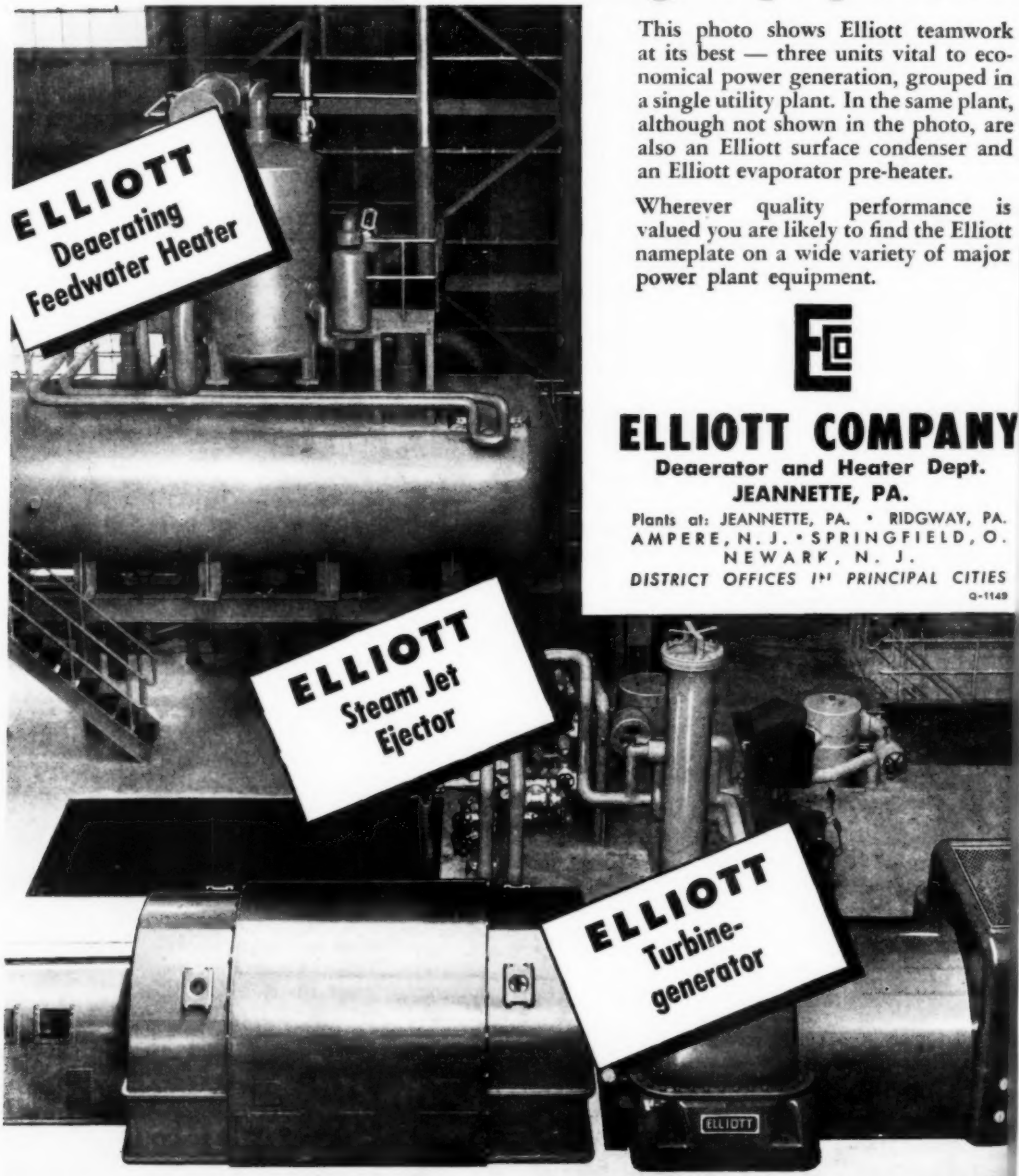
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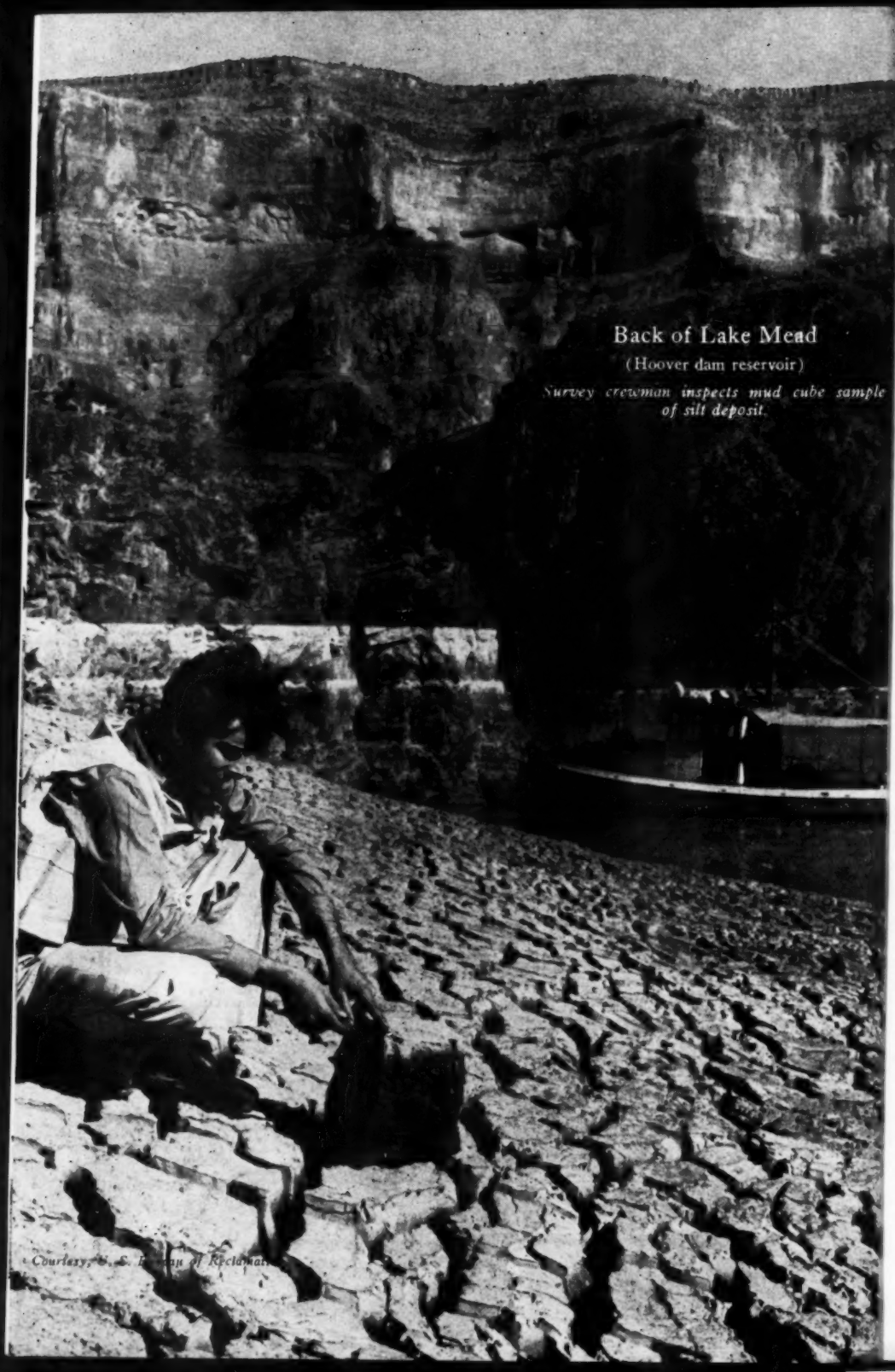
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# Utilities Almanack

## DECEMBER

| | | |
|---|---|---|
| 7 | Th | ¶ *Oklahoma Telephone Association ends annual convention, Oklahoma City, Okla., 1950.* |
| 8 | F | ¶ *Television Broadcasters Association begins meeting, New York, N. Y., 1950.* |
| 9 | Sa | ¶ *Academy of Radio Artists (Canada) ends meeting, Toronto, Ontario, Canada, 1950.* |
| 10 | S | ¶ *American Gas Association will hold Home Service Workshop, Washington, D. C., Jan. 3–5, 1951.* |
| 11 | M | ¶ *Pipe Line Contractors Association will hold annual convention, Houston, Tex., Jan. 9, 10, 1951.* |
| 12 | Tu | ¶ *American Water Works Association, New York Section, will hold luncheon meeting, New York, N. Y., Jan. 16, 1951.* |
| 13 | W | ¶ *Edison Electric Institute, Industrial Relations Committee, begins meeting, New York, N. Y., 1950.* |
| 14 | Th | ¶ *Building Industry Employers of New York State begin meeting, New York, N. Y., 1950.* |
| 15 | F | ¶ *New England Gas Association, Operating Division, will hold meeting, Boston, Mass., Jan. 17, 1951.* |
| 16 | Sa | ¶ *American Transit Association, Region VI, will hold management, small operations, and maintenance meetings, Fort Worth, Tex., Jan. 17–19, 1951.* |
| 17 | S | ¶ *Edison Electric Institute, Industrial Relations Committee, will hold meeting, Detroit, Mich., Jan. 18, 1951.* |
| 18 | M | ¶ *American Institute of Electrical Engineers will hold annual meeting, Philadelphia, Pa., Jan. 22–26, 1951.* |
| 19 | Tu | ¶ *American Society of Heating and Ventilating Engineers will hold annual meeting and exposition, Philadelphia, Pa., Jan. 22–26, 1951.* |
| 20 | W | ¶ *Southern Gas Association, Employee Relations Section, will hold round-table meeting, Mobile, Ala., Jan. 26, 1951.* |



Back of Lake Mead

(Hoover dam reservoir)

*Survey crewman inspects mud cube sample of silt deposit.*

*Courtesy, U. S. Bureau of Reclamation*

Public Utilities
FORTNIGHTLY

VOL. XLVI, No. 12 DECEMBER 7, 1950

# Sedimentation at Hydro Reservoirs

*Hydroelectric dams and other dam structures are of such a lasting nature that they may even defy depreciation estimates. But the usefulness of such structures may be permanently impaired over the long range due to the silting up of reservoirs behind such dams. How rapidly are these dams becoming silted? Will their usefulness eventually approach comparison with the pyramids? This article, by the staff engineer of the Senate Interior and Insular Affairs Committee, discusses the over-all problem of sedimentation from the standpoint of reservoir construction and erosion control.*

BY ELMER K. NELSON*

IN recent years there has been considerable discussion about the problem of silt accumulating in the reservoirs behind our major dams. Questions have been raised as to how long these structures will continue to function before their usefulness may be impaired by silt deposits. In the case of hydroelectric dams the power production capacity of the installation is a matter of obvious concern along this line. How would the demand for power, which has been stimulated by the initial large-capacity output of the plant, be accommodated in the event the hydro potential eventually deteriorated? Would steam plants be required for replacement? How prac-

* For personal note, see "Pages with the Editors."

tical is the process of "desilting"? Officials of the Department of the Interior, its various bureaus, Army Engineer spokesmen, have tried to allay such fears. They also have been investigating the actual degree of silting or "sedimentation" at certain of the major dams. Soil Conservation Service and Forestry Service agents of the Department of Agriculture, and members of the Federal Power Commission's river basin survey group, have looked into this rather basic problem, posed by nature, affecting the useful life of these expensive structures.

One notable example of such investigations has been that conducted in Lake Mead. The U. S. Navy and the U. S. Geological Survey have been looking into the murky waters impounded by Hoover dam. The Secretary of Interior, as a result of this survey, has been able to announce that the dam has a life expectancy of another 275 years. Everyone knows, Secretary Chapman pointed out, that any dam will eventually fill up with silt and debris deposited by the slowing down of the waters. The answer to how soon this would happen determines the "economic feasibility" of any such project.

For long-life expectation, Arrowrock reservoir, on the Boise river, stands first in the geographical group. In its thirty-two years of operation, silt has taken only 2.76 per cent of its capacity. The slow rate, which indicates that it will serve more than 1,100 years before filling, is explained by the low erosion rate on the heavily wooded slopes through which the river drains. Poorest of the silting prospects is that of Guernsey reservoir, which catches the North Platte river in Wyoming. In twenty years it has lost one-third of its capacity.

The Department of Interior estimates that even such a high sedimentation rate will leave it a useful life beyond its estimated pay-out time of forty years. But for corrective purposes the department apparently anticipated construction of another reservoir upstream, to reduce the rate to less than one per cent a year.

Before considering the pertinent factors concerning the actual siltation picture in the United States, some basic definitions may assist the reader to grasp the over-all impact of the siltation problem.

First of all, what is silt or sedimentation? Sedimentation, for the purpose of this discussion, is the disposal of the products of erosion from the land surfaces of the earth. Exposed rocks of all kinds are continually subjected to the influences of temperature, wind, and water, which is to say they are affected by the weather. The principal interest in the disintegration of rocks, and in the erosion of land areas, is in the movement of the loosened particles, particularly by wind and water.

In the United States relatively little sediment is believed to be moved by winds. In the more arid portions of the West, "aeolian" (wind-borne) sedimentation is, however, taking place. In the past, vast areas on the earth were blanketed by "loess," a kind of soil, which is chiefly composed of "aeolian" deposits. But as of the present time, from year to year, the average annual wind-blown deposits are not noticeably large. If they were

multiplied by, say, 10,000,000 years the results become important. Most of the destructive erosion in the Yellow river basin in China, for example, occurs upon aeolian deposits, which, by their nature, are poorly cemented and are readily dissolved by rain or flood waters. (This kind of soil is to be distinguished, therefore, from clay or other well-bound soils which resist surface runoff much better.) It has been estimated that the earth loads moved from west to east, in this Chinese river basin, probably exceed 1,000,000 acre-feet annually. This large amount of soil shift is by wind

SEDIMENTATION IN NORTH AMERICA

(Maxima of Marine Deposits)

*Columns two, three, and four, are concerned with actual mud, sand, and minute skeletal remains of marine animals which have been deposited and solidified over the years.*

| *Periods* | *Totals Feet* | *Shale* | *Sand-stone* | *Lime-stone* | *Geosynclines And Regions* |
|---|---|---|---|---|---|
| Cambrian | | | | | |
| Lower ..... | 10,200 | 2,350 | 6,100 | 1,750 | Inyo Co., California |
| Middle ..... | 6,200 | 850 | 400 | 4,950 | Cordilleran, Alberta |
| Upper ..... | 11,725 | 6,825 | | 4,900 | Cordilleran, Alberta |
| Ozarkian ..... | 5,700 | | | 5,700 | Appalachian, Ala. |
| Ordovician | | | | | |
| Lower ..... | 4,800 | 300 | | 4,500 | Appalachian, Pa. |
| Middle ..... | 12,200 | 7,100 | 4,100 | 1,000 | Appalachian, Newfoundland |
| Upper ..... | 6,050 | 2,140 | 3,910 | | Appalachian, Pa. |
| Silurian ..... | 6,385 | 2,286 | 2,104 | 1,995 | Ft. Daniel, Quebec |
| Devonian ..... | 12,745 | 8,015 | 4,135 | 595 | Appalachian, Pa. |
| Mississippian ..... | 5,800 | | 200 | 5,600 | Cordilleran, Utah |
| Pennsylvanian | | | | | |
| Early ..... | 2,200 | 1,500 | 600 | 100 | Appalachian, Ala. |
| All Pennsylvanian .. | 18,000 | 500 | 8,500 | 9,000 | Cordilleran, Utah |
| Permian ..... | 9,000 | 1,800 | | 7,200 | Glass Mts., Texas |
| (a) Total Paleozoic ..... | 111,005 | 33,666 | 30,049 | 47,290 | |
| Triassic ..... | 7,700 | 2,750 | 450 | 4,500 | Pacific, California |
| Jurassic ..... | 14,700 | 9,425 | 4,715 | 560 | Pacific, Cook Inlet, Alaska |
| Lower Cretaceous .. | 26,000 | 15,600 | 10,400 | | Pacific, Northern California |
| Upper Cretaceous .. | 38,200 | 20,700 | 17,500 | | Cordilleran, Wyoming |
| (a) Total Mesozoic ..... | 86,600 | 48,475 | 33,065 | 5,060 | |
| Eocene ..... | 14,000 | 8,400 | 5,600 | | Pacific, California |
| Oligocene ..... | 15,000 | 6,000 | 9,000 | | Pacific, California |
| Miocene ..... | 20,800 | 12,480 | 8,320 | | Pacific, South. California |
| Pliocene ..... | 10,000 | 6,000 | 4,000 | | Pacific, South. California |
| Pleistocene ..... | 1,600 | 640 | 960 | | Pacific, South. California |
| (a) Total Cenozoic ..... | 61,400 | 33,520 | 27,880 | | |
| Final Grand Totals ..... | 259,005 | 115,661 | 90,994 | About 50 miles of deposits. | |

(a) Paleozoic: An era characterized by the culmination of nearly all classes of invertebrates except insects. In its latter epochs land plants, amphibians, and reptiles first appeared.

Mesozoic: The era was the age of dinosaurs, of marine and flying reptiles, of ganoid fishes, and of cycads and evergreen trees.

Cenozoic: An era marked by a rapid evolution of the mammals and birds, of grasses, shrubs, and higher flowering plants, and by but little change in the invertebrates.

and water.[1] Geologists think that such shifts of masses are chiefly responsible for the earthquakes occurring in that section of the world.

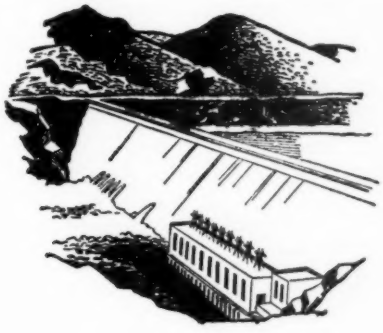
The concern of planners of public works, particularly for multipurpose projects in the West, is the effect of stream-borne sediments upon the economic feasibility of the works. Engineers, both publicly and privately employed, have recognized the many technical problems inherent in studies of the origin and disposal, of the chemical and physical natures, and of the behavior of sediments transported, and soluble minerals contained in surface waters. Fortunately, there is now general support of continued comprehensive studies in this complex field.

THE most common question is, when will a given reservoir be filled with silt? The engineer seldom has been able to answer this apparently simple question with a direct answer, for the good reason that the answer is not simple. It is, in fact, so complicated that predictions on it are but "educated" guesses. Final answers can come only when some storage units actually fill and the sediment is permitted to consolidate. Stream-borne sediments are composed of materials varying from collodial clay, a gelatinous substance, to large boulders. The load capacity of a stream depends upon the velocity of flow. The velocity is dependent upon the hydraulic gradient (the influence of gravity), and upon the characteristics of the channel. These factors are not constant in any reach of a natural stream, because their beds are constantly changing. Where a stream enters a channel reservoir, especially one of changing water surface elevations, other variable factors also enter.

When mountain streams emerge upon plains, the gradients flatten out. The first deltas appear as small piles of debris consisting of the coarser materials. These tend to spread the flows into distributaries. These, in turn, result in further reduction in velocity, and the water-borne sediments are deposited with the currents traveling the farthest distances. Deltas are built over long periods of time, the streams playing over them as old channels fill and the new ones are cut by water, which dropped portions of their burden. In this way, the water flow gains ability to shift older deposits to other portions of the deltas. Uncontrolled streams which flow, from side to side, over their deltas continually tend to alter their character and to increase the areas.

ALONG the flood plains of the larger streams, there are continuous changes due to much the same causes as affect delta building. The alluvial flood plains gradually build up, but channels also fill as the bed load deepens. Under certain flood flow conditions, beds of streams have been moved up into bodily suspension (flowing mud) and carried onto the adjacent flood plains. Large areas of older alluvial deposits forming the flood plains may be moved to new positions downstream. In short, valleys of major streams are unstable, all alluvial sediments tending to move toward the seas or toward the bottoms of inland basins as each flood crest passes.

[1] American Society of Civil Engineers Proceedings, Volume 64, page 1940.



## Engineering Experience with River Control

*"THE principal rivers of this country are often the greatest hazards to life and property. They are subject to flood flows now known to be unpredictable because the history of precipitation and runoff is too brief. Protection of municipal and agricultural developments on the flood plains by reservoir regulation, by channel confinement within levees, and by-passes, has given engineers much valuable data."*

IT has been noted that the channel and the flood plain of a large stream rise gradually. Although there are downstream movements of bed loads and the materials of the flood plains, the *in*flow of silt from tributary areas is generally greater than the volume actually moving down the valley.

It is for these reasons that it is risky to encroach upon the flood plain of a major river.

So much by way of brief preview of the over-all sedimentation picture, as the present geologic age experiences that process. The origins of the waterborne materials, presently of concern to planning in the United States, are the sedimentary deposits of both recent and ancient times. Sedimentation is a grand natural phenomenon. Since the beginning of the Paleozoic era, 500,000,000 years ago, there has been measured on the North American continent some 50 miles of sedimentary deposits. The extent and occurrence of erosion from land surfaces, as reflected in sediments of known age, are summarized in the table on page 795, beginning with the oldest.

The principal rivers of this country are often the greatest hazards to life and property. They are subject to flood flows now known to be unpredictable because the history of precipitation and runoff is too brief. Protection of municipal and agricultural developments on the flood plains by reservoir regulation, by channel confinement within levees, and by-passes, has given engineers much valuable data.



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THROUGH some leveed river reaches, suspended materials have been discharged without channel aggradation for several decades. Engineers know that conditions are so variable that this cannot be accomplished in all cases. It is reported that silty flows of the Nile river, at the Aswan dam, are passed through, and only the clear flows which follow are retained in storage, thereby preserving the storage capacity of the reservoir. Most streams do not have such flow characteristics. About fifteen years ago an eminent American engineer, J. C. Stevens, wrote:[2]

> Man cannot hope to halt the processes of mountain erosion and plain building. The land he cultivates could not exist except for these forces. He must expect that rains will gully his fields, or cover them with mountain debris, and that streams will continue to carry sediments that will fill the canals and reservoirs.

The writer spent his early boyhood on the western plains where the normal annual precipitation is about 15 inches. He experienced dust storms of great violence and duration. And this was before the advent of trough plowing and other practices which are popularly held unduly responsible for latter-day erosion. At that time there was no overgrazing of the prairies. Only a fraction of a per cent of the lands were farmed and only natural conditions were obtained respecting the land areas. The "dust bowl" then was not man-made. A noted geologist once said that a 10 per cent reduction in average wetness and similiar increase in wind would bring about erosion in the arid West at a rate which would make much of the area *uninhabitable!* If severe drought periods were followed immediately by sustained seasons of heavy precipitation, erosion and removal of wind-blown materials by surface waters would be relatively rapid. The optimum condition is doubtless an average weather, without extremes of wind and precipitation, where native vegetation can flourish in desert and semiarid regions.

THE origins of water-borne sediments are chiefly, as above indicated, large areas of poorly cemented geological formations of both recent and ancient ages. In some basins where most of the land area has been used for agricultural purposes for a few decades, the erosion problem is being studied in the light of land-use operations. There is little disagreement on the desirability of improvement in soil conservation and erosion control practices, when real feasibility is demonstrated. The determination of feasibility should be based upon *all* of the benefits and not solely upon one or two.

The slogan, "Save the priceless heritage of our top soil," does not always express the sole reason for unlimited expenditures for soil conservation. Many agricultural soils are formed from the existing clays, shales, and sands of the formations at hand, and, for the most part, they are formed, in this country, more rapidly than their removal by erosion. The effects of the eroded materials upon the streams carrying these loads, and upon storage and other flow-control structures, are always detrimental. The maintenance of the functions of

[2] Transactions American Society of Civil Engineers, Volume 101.

these structures is sometimes of more concern than the loss of the soil because of ultimate damage downstream in a basin. Viewed in this perspective, soil conserved, and thus withheld from streams, may have a value of many times its single-purpose value on a farm.

STUDIES by the Soil Conservation Service, Department of Agriculture, are now progressing to the point where definite proposals for retarding erosion soon can be presented. The most forward-looking step to date was the creation within the Federal Inter-Agency River Basin Committee of a subcommittee on sedimentation in 1946. Its present chairman is Carl B. Brown, of the Soil Conservation Service.

The first technical meeting of national scope on sedimentation problems was held in Denver, Colorado, in May, 1948, under the sponsorship of this subcommittee. In his opening address, Chairman Brown said that the harmful effects of sedimentation may

| Stream | Station | Drainage Area Sq. Mi. | Annual Sediment Load Acre-feet Total | Acre-feet Per Sq. Mi. |
|---|---|---|---|---|
| Potomac | Washington, D. C. | 11,560 | 3,650 | 0.31 |
| Ohio | Paducah, Ky. | 203,000 | 38,570 | 0.19 |
| Wisconsin | Prairie du Sac, Wis. | 8,900 | 420 | 0.05 |
| Des Moines | Tracy, Iowa | 12,400 | 10,320 | 0.83 |
| Canadian | Calvin, Oklahoma | 28,700 | 49,060 | 1.71 |
| Willamette | Salem, Oregon | 7,280 | 484 | 0.07 |
| Tuolumne | Don Pedro Dam, Calif. | 996 | 198 | 0.20 |
| Missouri | Ft. Peck Dam, Mont. | 57,800 | 2,200 | 0.04 |
| Yellowstone | Sidney, Mont. | 69,450 | 31,870 | 0.46 |
| Missouri | Williston, N. D. | 164,500 | 44,600 | 0.27 |
| Missouri | Kansas City, Mo. | 484,200 | 86,000 | 0.18 |
| Mississippi | Near mouth, La. | 1,234,700 | 393,540 | 0.32 |
| Arkansas | John Martin Dam, Colo. | 18,933 | 4,284 | 0.23 |
| Boise | Arrowrock Dam, Idaho | 2,170 | 239 | 0.11 |
| Colorado | Lees Ferry, Arizona | 107,900 | 117,800 | 1.09 |
| Colorado | Grand Canyon, Ariz. | 137,800 | 148,600 | 1.08 |
| Colorado | Lake Mead | 167,800 | 105,500 | ... |
| | *Tributaries of Colorado River* | | | |
| Little Colorado | Coconino Dam, Ariz. | 24,120 | 25,800 | 1.07 |
| San Juan | Bluff, Utah | 23,000 | 27,600 | 1.20 |
| Green | Green River, Utah | 40,600 | 15,450 | 0.38 |
| Colorado | Cisco, Utah (above mouth of Green River) | 24,100 | 12,050 | 0.50 |
| Gunnison | Bridgeport Res., Colo. | 8,020 | 2,640 | 0.33 |
| Rio Grande | Elephant Butte Res. | 25,923 | 14,250 | 0.55 |
| | *Tributaries of Rio Grande* | | | |
| Rio Jemez | New Mexico | 1,009 | 2,780 | 2.76 |
| Rio Chama | New Mexico | 3,200 | 5,950 | 1.86 |
| Rio Puerco | New Mexico | 5,860 | 11,720 | 2.00 |
| Rio Salado | New Mexico | 1,434 | 2,765 | 1.93 |
| Big Horn | Kane, Wyo. | 15,900 | 9,050 | 0.57 |
| Powder River | Moorhead Res., Wyo. | 8,080 | 8,250 | 1.02 |
| Grand | Shadehill Res., S. D. | 3,070 | 276 | 0.09 |
| North Platte | Guernsey Res., Wyo. | 5,400 | 1,240 | 0.23 |
| South Platte | Littleton, Colo. | 1,324 | 133 | 0.22 |



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be divided into five major categories as follows:

1. Sediment concentration in water may be harmful even though the stream is fully competent to carry all of its load without deposition. High turbidity may destroy the value of the stream for fish and wild life. It makes the stream or lake undesirable for swimming. Coarse sediment in transportation may damage power turbines. Fine sediment must be filtered at considerable cost before the water is acceptable for public, domestic, and industrial uses.

2. Sedimentation in improved channels, floodways, ditches, and canals used for navigation, drainage, irrigation, and flood control must be prevented or the sediment removed if these improvements are to function effectively.

3. Sedimentation in reservoirs causes loss of storage capacity, which depreciates the value of the storage development and causes other losses such as increased evaporation, decreased recreational opportunities, and impaired esthetic values.

4. Deposition on land, improvements, and habitats, mainly during flood flows, causes severe damages in many areas to agricultural land, to urban areas, to transportation facilities, and to native wild life.

5. In addition to these direct damages, aggradation of stream channels and natural or artificial floodways has the effect of increasing flood stage for any given discharge. Consequently the area inundated and the extent of flood-water damages may be increasing as a result of sedimentation, although the volume and rate of runoff remain substantially the same. As floods affect all classes of enterprise and resources . . . this is an all-inclusive form of damage.

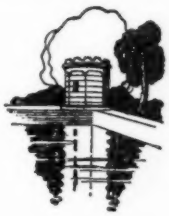
THOMAS MADDOCK, JR., of the branch of project planning, Bureau of Reclamation, in discussing reservoir problems, noted that reservoirs do not silt-up from the bottom altogether, but that sediments may settle in the upper, or flood-space, portions in greater amounts than in the dead-storage space. He also directed attention to the need for continuous reservoir surveys for determining the changes in reservoir operation schedules necessitated by reductions in capacity of the spaces set aside for the various purposes for which the reservoirs were authorized.

Mr. Maddock concluded with this statement:

> What I would like to point out, in closing, is that reduction in acreage of irrigated areas will have to take place before the last reservoir site is utilized. We can expect full development of our western streams before our present reservoirs are filled with sediment. Water will not be available to provide for the excessive losses that will take place in these reservoirs in later periods of their life, and, for evaporation from newly constructed reservoirs. We therefore must, to the extent possible, preserve what we now have.

GAIL A. HATHAWAY, special assistant, Office of Chief of Engineers, Department of the Army, in his comprehensive statement on sedimentation problems related to floodways, channels, and harbors, summarized the more important problems as follows:

> Sedimentation problems are encountered in the development and use of alluvial rivers from the headwaters to the mouth, extending generally to the river deltas or outer bars of coastal harbors. The most important of these problems usually relate to:
>
> a. Obstruction of floodways and navigation channels by deposition of sediment.
>
> b. Major changes in channel alignment resulting from deposition



## The Missouri River Mud Problem

*"In the Missouri river basin the deposition of silt under present conditions is not a problem, most of it being carried to the Mississippi. But the construction of reservoirs for irrigation, flood-control, and power purposes above Sioux City, Iowa, must give consideration to their ultimate filling with stream-borne sediments now totaling at least 50,000 acre-feet annually."*

and scour in unstabilized channels.

c. Blocking of outlets of sewers, water intakes, and drainage canals by sediment.
d. Destruction of river improvements, bridges, and similar works as the result of scour and bed movements.
e. Readjustment of hydraulic conditions below newly constructed reservoirs, resulting from retrogression, deterioration of channel efficiencies caused by storage or diversion of normal flows and intermittent releases, changes in channel alignment, and similar factors.

The proceedings of this meeting were published by the Bureau of Reclamation.

SUSPENDED sediments in streams are measured by sampling the moving fluid, and determining what portion of the flow, by weight, these sediments represent. When the suspended particles first settle out, space they occupy as a sedimentary deposit is quite different in water than on land where dehydration and condensation take place. The sediment in some reservoirs has been found to weigh about 45 pounds per cubic foot. The same sediment consolidated on a river delta may weigh nearly 90 pounds per cubic foot.

It may well be, then, that it would be possible to drain a rapidly silted reservoir, dry the sediment, and thereby recapture about 50 per cent of its original capacity.

The ultimate weight of sediments in reservoirs is only an estimate at best. Recent investigations show that the 1935-1949 annual average sediment deposition in Lake Mead occupies 105,500 acre-feet, while the estimated silt in the flows passing the Grand Canyon station average about 150,000 acre-feet annually, assuming a dry sediment weight of 70 pounds per cubic foot. There is additional drainage area between the Grand Canyon



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station and Hoover dam of 30,000 square miles which produces considerable sediment. Allowing for some silt discharge there is still a considerable discrepancy, unless these values are used with proper understanding of the periods of record. Most engineers now believe the life of Lake Mead, as a storage and power project under present river storage conditions, will exceed 300 years. Additional upstream reservoirs and erosion control could increase this to 1,000 years. Long before 300 years have passed, erosion will be abated to a considerable degree for the logical reason that the storage is worth too much to ignore the causes of its reduction.

It has been estimated that presently observed erosion in the arid West results in suspended sediments in streams that are derived in approximately equal amounts from (1) channel changes in the flood plains of main streams, (2) gullying on the smaller tributaries, and (3) sheet erosion of tablelands. When these quantities become more exactly allocable, the costs of alleviative measures may be accurately evaluated, and true benefit-cost ratios calculated. Urgency in these problems is recognized even if a permanent solution is not likely. It is a matter of economics. Not only does storage cost tremendously, but reservoir sites are limited.

DATA supplied by the Bureau of Reclamation and Corps of Engineers on transported sediments are not to be assumed as final. Rather, they are approximations under existing conditions of erosion opportunity. The calculated quantities are based on weights which are, on an assumed value of the weight of a unit volume, in turn, reduced to volumes. It is not claimed that the measurements of weights of suspended and moving sediments are absolute, nor that unit volumes, as calculated, represent the volumes under all conditions of age and cover. The values shown are therefore usable only by those competent to understand the chemistry and physics of soils, the several subdivisions of hydraulics, and the pertinent elements of physical geology. These subjects are highly specialized and expanding. They involve research and applied science. It may be correctly concluded that sufficient funds must be made available to carry on adequately the investigations prerequisite to proper planning by the coöperating agencies.

With the qualifications suggested the data presented in table on page 799 are submitted for key gauging stations on some principal streams, the sources being noted above.

THE foregoing data as heretofore noted, are not necessarily comparable for all points on a stream or in a common basin. They represent, rather, the bare preliminary data now available, and are therefore subject to revision. The stations in the Missouri basin indicate that the silt burden below the mouth of the Yellowstone river comes chiefly from the Yellowstone. In the Missouri river basin the deposition of silt under present conditions is not a problem, most of it being carried to the Mississippi. But the construction of reservoirs for irrigation, flood-control, and power purposes above Sioux City, Iowa, must give consideration to their ultimate

filling with stream-borne sediments now totaling at least 50,000 acre-feet annually. Consideration, in particular, involves the design as well as the operation and maintenance of the reservoir system.

THE capacity of Fort Peck reservoir and other storage reservoirs of the ultimate total built and to be built above is in the Missouri basin, and will probably exceed 30,000,000 acre-feet. In the Yellowstone basin the ultimate total will probably exceed 2,000,000 acre-feet, and this storage will be affected by siltation. Downstream from Fort Peck dam, main stem reservoirs will ultimately have a combined capacity of 40,000,000 to 45,000,000 acre-feet. These multipurpose reservoirs have control of all residual flows from a large drainage area subject to relatively heavy erosion, and here the treatment of the area is not complicated by a highly unfavorable ratio of canyon exposures.

In the upper Colorado basin, above the mouth of the Little Colorado river, a study is being made of a storage system which, as to main stream locations on the Colorado, the Green, and the San Juan rivers, will ultimately aggregate about 48,000,000 acre-feet. These units, some to a greater degree, will all be affected by sedimentation. It is conceded that erosion in much of the drainage area above Hoover dam will be difficult to control, and that here is a complex problem of first magnitude.

THE sedimentation of reservoirs in the Colorado and the Missouri basins, as noted heretofore, is a factor in design, but the sources of these sediments and their nature are also matters of concern.

When additional silt-sampling stations are operated, it will be possible to isolate the portions of the drainage areas which produce the most sediment per unit area. The critical areas may then be surveyed in detail and the sources of the sediment discovered. As was pointed out heretofore, overall sedimentation statistics only show whether erosion is of importance in a particular watershed. The data submitted, for example, can be arranged to show that a portion of southeastern Utah, in the Colorado river basin, contributes three times the average silt per unit area produced by the whole basin above Lake Mead. Sampling at stream-flow stations must be supplemented by sufficient precipitation measurements to enable scientists to analyze storm routes and the intensity as well as the quantity of rain, snowfall, and snow melt.

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"RECOGNIZING *that absolute freedom is a fantasy, let me define a free economy as one in which private enterprises are protected but not controlled by government. Freedom is protected by laws maintaining orderly ways and means of doing business; and by laws preventing and destroying private monopolies; but not by laws which substitute an artificial regulation of business for political ends, in place of a natural regulation by the impartial forces of fair competition.*"

—DONALD R. RICHBERG,
*Lawyer.*



# Utility Rate Fixing by Labor Arbiters?

*Wage arbitration in the absence of well-defined standards can find little support on the part of industry management which has had such experience. Arbitration under state laws with established standards and court review is still too new to warrant fair judgment. This article by a noted transit engineer raises the serious question of utility rate making via wage arbitration.*

By HAWLEY S. SIMPSON*

In postwar years public utilities and their labor unions have turned with growing frequency to *"ad hoc"* arbitration when unable to agree upon terms of a new labor contract. Some of the nation's large power systems have taken this step for the first time during the past five years, and in at least one instance wage arbitration has been resorted to twice in the postwar years by a large eastern electric utility.[1]

Frequently such action has been taken avowedly for the purpose of avoiding a work stoppage when the consequences would so vitally affect the public interest. In other cases, strikes have been threatened or have ensued when collective bargaining has broken down, but voluntary arbitration has not been adopted. Largely as a consequence of the existence or imminence of utility strikes, legislation has been enacted designed to compel disputants in the field of labor-management relations in public utilities to submit either to fact-finding procedures or final and binding arbitration as an alternative to the use of economic force.

These developments are tending to bring about in the electric power industry an increasing number of terminal arbitrations, either voluntary or under legal compulsion. If this movement continues, contract arbitration will become as much a part of collective bargaining in the power industry as it is in transit. There, in a great many contracts, arbitration is set up as the means of resolving contract

*For personal note, see "Pages with the Editors."

[1] Consolidated Edison Company, New York, New York. The first award is reported in 6 LA 830, 1947.

negotiations when all other efforts fail.

In some instances arbitration is specifically established in the contract as a terminal step. More frequently it is only inferred through the inclusion of a general "all-disputes" clause which, under certain circumstances, may be, and generally is, construed by union attorneys as applicable to disputes over the terms of a new agreement. In transit, the labor side of the field has long been represented by a group of attorneys and economists who have become extremely proficient in the art of presenting labor's views before arbitral boards.

Should this or a similar group become entrenched in the power field as strongly as in transit, which is not a too remote possibility, the end result might very well be that utility rates would, in the final analysis, be determined not by duly designated utility commissions but by individuals acting as arbitrators without any responsibility whatsoever for the result of their decisions. Unless utility commissions give heed to the possibilities inherent in such a situation, their powers may shortly be abrogated to the professional arbitrator whose attitude toward the rate-making function may be similar to that expressed by one board of arbitration when it said:

> Management undoubtedly must meet formidable problems in carrying this added cost burden (an award in excess of $3,000,000). Its problem is quite unlike that of many industries where, in the postwar period, it has been a simple matter to increase prices and thus absorb unusual cost increases. . . . Mounting costs and decreasing revenues are a combination that cannot long be withstood. It is management's unenviable task to grapple with that problem.[2]

That the company involved was handed a truly "formidable problem" is indicated by the fact that three years have since elapsed, two commission proceedings have been held, litigation conducted in two of the state's courts, and a third commission proceeding is currently in progress (October, 1950) in a continuing effort to recover these added labor costs.

The relationship between the acts of arbitration boards and the authority of public utility commissions has been pointedly discussed by another eminent arbitrator who has said:

> The relationship between the public utility commission and the statutory arbitration boards requires some careful thought and attention. The problem is especially important in those utilities, such as the bus industry, where labor costs are a high percentage of total costs. Should the commission, when considering fare or rate adjustments, accept as a reasonable expense, any wage increase granted by a statutory arbitration board? If such procedure is followed, the arbitration boards rather than the commission will be exerting major control over the rates in the utilities with high labor costs.[3]

Whether public utility commissions should undertake the functions of labor arbitrators and so protect against invasion of the rate-making field by

[2] Opinion of public members, Amalgamated Association of Street, Electric Railway, and Motor Coach Employees of America and Public Service Coördinated Transport and Public Service Interstate Transportation Company, August 22, 1947.

[3] "The Handling of Emergency Disputes," Thomas Kennedy, Proceedings, Second Annual Meeting (1949), Industrial Relations Research Association, pages 25, 26.



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arbitrators is beyond the scope of this article. It is enough to say that, so far as can be ascertained, only one state utility commission has legislative authority to sit as a labor arbitral board, *viz.*, Missouri. The Public Service Law of that state provides: "Whenever any public utility has a controversy with another public utility or person and all the parties to such controversy agree in writing to submit such controversy to the commission as arbitrators, the commission shall act as such arbitrators, and after due notice to all parties interested shall proceed to hear such controversy, and their award shall be final." At least four times in the past thirty years the commission has sat as a board of arbitration; in every instance in a transit case.[4]

It would not, in itself, be essential that utility commissions conduct arbitrations in their own protection if there were a body of rules or criteria for the guidance of arbitral boards to which adherence must be had and which, among other things, required that appropriate weight be given to the public interest.

As a simple matter of fact, if arbitration is to be acceptable to utility managements as an alternative either to continued collective bargaining or the use of economic force, then there must be some assurance given to those who pay the bill, which eventually is some segment of the public, that ground rules known to the parties and to the arbitrator will be adhered to.

An eminent jurist's view of arbitration in the absence of standards is found in the opinion by Chief Justice Arthur T. Vanderbilt of the New Jersey Supreme Court in the case of New Jersey *v.* Traffic Telephone Workers' Federation:

> Furthermore, in the absence of standards, the very term "board of arbitration" carries with it the implication that the board will act in the way that arbitrators customarily act, not according to established criteria but according to the ideas of justice or of expedience of the individual arbitrators. Anyone who has had experience with arbitration realizes that this is the inherent weakness of arbitration as a remedy. Unless standards are set up in any submission to arbitration the tendency to compromise and be guided in part by expediency as distinguished from objective considerations and real right is inevitable. This is especially dangerous in the case of

[4] In 1919 and 1920 the commission arbitrated controversies involving the demands of Division 788 of the Amalgamated Association of Street, Electric Railway, and Motor Coach Employees of America upon United Railways Company of St. Louis for increased wages and changes in working conditions. In 1928 they arbitrated a controversy between the St. Louis Public Service Company, successor to United Railways Company of St. Louis, and the same labor union. The fourth instance was an arbitration involving a controversy over wages between St. Joseph Railway, Light, Heat & Power Company and Division 847 of the same union.

¶ "LARGELY *as a consequence of the existence or imminence of utility strikes, legislation has been enacted designed to compel disputants in the field of labor-management relations in public utilities to submit either to fact-finding procedures or final and binding arbitration as an alternative to the use of economic force.*"

an arbitration where the rights of third parties, here the public, are concerned. Any increase in operating costs which may result from the arbitration will inevitably be charged to the public in increased rates. But the board of arbitration is nowhere directed to consider the rights of the public, which will ultimately be called upon to foot the bill.[5]

THESE ground rules or, as otherwise called, criteria, can issue from only three sources. Either, (a) they will be the result of collective bargaining between the parties establishing criteria to be incorporated in the submission agreement; or (b) those who practice in the field of arbitration will, themselves, establish a set of generally applicable rules; or (c) legislative enactments will fix the standards which are to be followed.

Many competent arbitrators have argued that it is the function of the parties to adopt and work out their own rules. They point out that criticism of arbitrators, and arbitration, is indirect criticism of the parties because they gave the arbitrators no guide to follow in deciding the issue. On this subject David L. Cole, in an address before the third annual meeting of the National Academy of Arbitrators, has said:

> . . . If they (parties to an arbitration) want more certainty in arbitration methods, it is up to them to work out rules or other binding directions to govern the arbitration. They either don't bother to get such rules written and agreed on, or they find the other side disagrees with them and they are not persuasive enough to change this viewpoint. Nevertheless, despite their own shortcomings in working out the underlying agreement or submission, they feel free to hold the arbitrator to account if he does not meet the rules or standards which that party unilaterally advocates.[6]

In the same vein, another experienced arbitrator has said:

> In the arbitration of grievances under a contract, the arbitrator has some standards to apply in making his awards. These standards are the provisions of the contract itself. In terminal arbitration, the arbitrator has no standards to follow. In making his award he is reduced to guesswork. Furthermore, he is doing a job which the parties themselves should be doing. They have abdicated in favor of a neutral and are dodging their proper responsibilities; if the arbitrator hands them, or either of them, a lemon, it is their own fault.[7]

ANOTHER authority has commented on the need for standards to be developed by the parties:

> The proper use of arbitration in future contract determination depends upon the development of the stipulation to arbitrate.
>
> I have been in many arbitration cases where the party said: "We can't settle this arbitration dispute, you settle it for us." They gave me no instructions. That's what I call "open-end arbitration." When the parties take that kind of arbitration, great risks may be entailed. On the other hand, they can limit the arbitrator's judgment by specifying in the stipulation to arbitrate what guides he must follow.[8]

[5] 49 ALC 649, 655 (May, 1949).

[6] Reported in 25 LRR 165, January 30, 1950; see, also, abstract in *Arbitration Journal*, Volume V, No. 1, 1950, pages 12-15.

[7] "The Collective Bargaining Agreement: Its Nature and Scope," by Charles O. Gregory, *Labor Law Journal*, March, 1950, page 457.

[8] "Criteria for Wage Arbitration," an address by George W. Taylor before a Special Conference of the National Industrial Conference Board, Inc., on "Wages and Salaries in 1949"—New York, February 2, 1949.



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## What Industry Has Learned about Arbitration

*"ARBITRATION and fact-finding, either voluntary or under legislative guidance, but in the absence of well-defined standards, find little support by the management among those industries with the longest history of collective bargaining with nationally organized unions. On the other hand, arbitration under state laws with established standards and right of judicial review, has been too infrequently practiced to enable a categorical conclusion to be reached as to whether or not the public interest has been adequately safeguarded."*

WHILE, unquestionably, it would be helpful to all concerned if acceptable arbitral standards could be agreed to prior to submission of the dispute, the fact is, as the author has pointed out elsewhere,[9] that were it possible for the parties themselves to develop objective standards, the likelihood of arbitration would become most remote. If standards could be agreed to, then agreement could almost certainly be reached as to what the contract should provide, in conformity with such standards. Or, at least, the scope of the arbitration could be greatly limited. The reason the parties do not get together during negotiations is because the *ex parte* standards which they establish for themselves as criteria for a wage settlement are too diverse.

If, as we believe, it is a virtual impossibility for the parties to establish criteria by mutual agreement and if, as it appears, arbitrators will not establish such criteria, then it follows that arbitral standards can come only from legislative enactments. Such standards already have been adopted in rather concrete form in the states of Indiana, Pennsylvania, and Florida, and in less definite terms in Wisconsin and New Jersey. That is a development which representatives of labor in this field seem to oppose[10] and yet, from the standpoint of management, it must come if arbitration is to continue to be practiced.

[9] Proceedings, Conference on Arbitration, November 12, 1948, Labor Relations Council, University of Pennsylvania, page 65. See also Jesse Freidin in "The Status and Expendability of the Labor Arbitrator," *Arbitration Journal*, Volume V, No. 1, 1950, pages 15-19.

[10] See Eli L. Oliver in "The Status and Expendability of the Labor Arbitrator," *Arbitration Journal*, Volume V, No. 1, 1950, page 22.

FAILURE to establish such standards will necessarily result in employer resistance to terminal arbitration unless management is willing to undertake the risk of arbitrating a case where the personal whims, prejudices, likes, and dislikes of the arbitrators—known or unknown to management—will dictate the decision. One of the best-known arbitrators in the field has said, in effect, that the only practical criteria may be found in this question: (a) How much of a concession must be granted to the union to keep it from striking? or, (b) if on strike, what is the least price that must be paid to bring the men back to work? Neither of these queries answer the merits of the issue involved, but both go wholly to the psychological aspect of the case and the emotional and temperamental aspects gain precedence over the economic, factual, and judicial phase of the function of arbitration.[11]

This attitude of arbitrators that expediency should prevail is well set forth by *Business Week* [12] in paraphrasing an explanation of the motivating reasons for the recommendations of the President's steel fact-finding board, by the board's chairman:

> The fact-finding board had a labor-relations problem as well as an economic problem to solve. It had to find a formula which would prevent the threatened strike. Under such circumstances the board couldn't give either side all that it wanted. It figured its recommendations on pensions were *the minimum that each* side would accept. (Italics added.)

Terminal arbitration, if it is to survive and develop as a method of resolving labor-management disputes over new contract terms, must be founded more on reason and less on expediency. The formulation of fair, adequate, and workable criteria or standards is an absolute necessity, and great strides have been made in this direction in the utility disputes legislation enacted by several states [13] in the last three or four years. It is not to be expected that the initial formulation of such standards as found in these state laws will prove perfect or foolproof. It is of the nature of our law-making process that revision and improvement be born out of the experience gained in the administration and practical application of this legislation.

UNFORTUNATELY, the primary emphasis heretofore has centered upon the constitutionality of such laws. A series of state court decisions have upheld their validity and the United States Supreme Court during its current term will finally determine this issue.[14] Moreover, the highest appellate court of one of the states, in what may well become a landmark de-

[11] "Criteria for Wage Determination," by George W. Taylor, *Management Record*, June, 1949, page 24.

[12] Viewpoint of Carroll R. Dougherty, board chairman, as reported by *Business Week*, April 1, 1950, in article captioned "What Do Fact-finders Find?"

[13] "Utility Antistrike Laws," by Roscoe Ames, PUBLIC UTILITIES FORTNIGHTLY, Volume XL, No. 3, July 31, 1947.

For a review of a means of eliminating utility strikes, without resort to arbitration, see "Virginia Keeps Its Public Utilities Running," by James J. Kilpatrick, PUBLIC UTILITIES FORTNIGHTLY, Volume XLIV, No. 13, December 22, 1949, pages 843-850.

For a discussion of Missouri's fact-finding procedures, see "How Missouri's New Utility Antistrike Law Works," by Vance Julian, PUBLIC UTILITIES FORTNIGHTLY, Volume XLII, No. 4, August 12, 1948, pages 204-210.

[14] On Monday, October 23rd, the U. S. Supreme Court consented to review the constitutionality of the Wisconsin Utility Disputes Law on appeal in the United Gas, Coke & Chemical Workers Union (CIO) and Milwaukee Gas Light Company Case.

cision, has recently laid down several very fundamental rules to guide arbitral boards established under such statutes.[15] The law requires, the court declared, that such boards apply not one but *all* of the standards spelled out in the statute. It prescribes the making of written findings of fact prior to the reaching of an award or order by statutory boards of arbitration. The award or order must be supported by a preponderance of the evidence or substantial evidence as ascertained by reference to the findings of fact on which the award or order is based. The findings and order must be the product of collective consideration and discussion by all the members comprising the particular board. Finally, such boards are not entitled to base their findings and conclusions on "trends," such as trends in the cost of living, wage trends, and the like, but upon facts.

Everything points to the conclusion that the electric power industry is on the threshhold of an era in labor relations in which boards of arbitration will be more frequently called upon to make decisions of far-reaching magnitude.

[15] New Jersey Bell Telephone Company and Communications Workers of America, CIO, decided by the New Jersey Supreme Court on October 2, 1950.

Whether expediency will ultimately dictate these decisions, or whether they will be reached in a quasi judicial manner, depends, to a very considerable extent, upon the industry's attitude towards the sort of arbitration which can best meet the public interest.

ARBITRATION and fact-finding, either voluntary or under legislative guidance, but in the absence of well-defined standards, find little support by the management among those industries with the longest history of collective bargaining with nationally organized unions.

On the other hand, arbitration under state laws with established standards and right of judicial review, has been too infrequently practiced to enable a categorical conclusion to be reached as to whether or not the public interest has been adequately safeguarded.

Suffice it to say that the electric power industry has an important stake in the development of the proper type of fact-finding or arbitration as the terminal point in labor disputes, and the unquestioned determination of the American people to outlaw the use of economic force in the public utility field points up this as one of the problems which should have the best attention of the leaders in the field.

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*"SENATOR Taft lacks a soothing radio presence. At electronic firesides, phony or genuine, he is as near to being a dud as a man can get. His lack of masculine beauty is spectacular. As a baby kisser he is awkward. His voice is flat, nasal, and in some of its timbres reminiscent of* DONALD DUCK'S. *His advocacy of give-away programs has been practically nil. The Senator's garb is undistinguished and he wears it in an undistinguished manner. He offers nothing to the electorate except brains, industry, and character—especially character. That seems to be enough."*

—EDITORIAL STATEMENT,
*The (Baltimore) Sun.*



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# Nothing Can Stop Utility Service

*Utilities must use the surface or undersurface of city streets for their distribution networks. The companies, however, are not guaranteed that a certain area, above or below the paving, is their permanent domain. It becomes the utility's task to move any of its wires or conduits without interruption to its customers' service.*

By A. BRYAN MARVIN*

ELECTRICITY is ubiquitous. At work daily in our homes, offices, and shops, in our trains, subways, and trolleys, the kilowatt has come to be an accepted fact. We do not think of its trials and tribulations, neither do we stop to consider the difficulties of the people who make it and bring it to us.

The opponents of private industry and of the investor-owned utilities have long been aware of this feature of electric service. They are even a little jealous of it. One of the suspiciously outspoken groups once urged its members to paste poison labels at every electric switch and outlet in their residences. While not very complimentary, these labels would at least have served to remind customers of that modern miracle: central station electric service.

But the dependability of service which makes electricity such an unnoticed part of our everyday life is not a simple force from Mother Nature's bag of tricks. It takes men, materials, and money to keep the current flowing and the voltage up to par. Ingenuity is called into play along with muscles and shovels. The art of human relations is necessary to smooth ruffled feelings. The service that waits only for the flick of a switch before it springs into action is hiding behind that switch because of the coördinated efforts of a number of people.

THE problem of providing continuous service has a number of aspects. The prime mover, the generator, the switching galleries—each is a complex part of the over-all puzzle. Another element in the chain of supply is the distance over which the kilowatt must be carried from the generat-

*For personal note, see "Pages with the Editors."

ing station to the customer's meter pan. In urban areas, where the cables are located underground both for practical and aesthetic reasons, this part of the problem has a rather specialized intensity.

In these same urban areas, the public has become exceedingly dependent on electricity. Giant refrigerators protect the city's food supply, high-pressure pumps are the first line of defense against fire, elevators provide the only convenient means of access to skyscrapers. Continuous service has become a must, and yet the very nature of the city appears to preclude the unbroken flow of power.

In New York city, this aspect of the problem has just about reached a pinnacle of development. The glorified piece of real estate that is Manhattan is the most drilled into, tunneled through, cut and blasted, plug and feathered chunk of gneiss and schist the world has ever seen. As a result, the area beneath the streets is crowded beyond belief.

Under the glossy asphalt of Manhattan's streets lies a conglomeration of pipe and cable that makes the most hardened sidewalk superintendent stop and gape in surprise. When the street covering is removed, the subsurface looks like a tumbled mass of giant grey spaghetti.

A UTILITY company, generally speaking, has a franchise to use the area beneath or above the street in order to conduct its business. But the franchise does not guarantee the company any right to a *particular* section of the street. In a progressive municipality utility distribution pipes and cables are being moved constantly in order to get out of the way of new civic structures such as water mains, sewers, bridges, tunnels, and housing developments.

The facilities must be removed, relocated, reconnected. And the relocation job provides no excuse for a service interruption. The "business as usual" shingle must hang on every cable. Customers alongside the project must be able to use their television sets during the move and receive both the day-time and the evening programs.

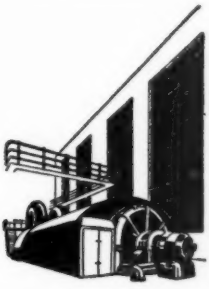
Those customers who are served through the high-voltage cables reaching across the construction area (and they may live so far away that they do not realize any street work is being done) must keep right on receiving all the kilowatts they want. And each electrical unit must be plump and fresh, not dimmed and lusterless as it would be if cables were removed along the way and the voltage was strangled off passing through a distribution bottleneck. The problem has complex ramifications that wander off into a sea of technicalities and a bewildering labyrinth of engineering data.

But every single one of these engineering problems and each of these technicalities must be solved and annotated before the picks begin to tear into the asphalt. Construction of the United Nations headquarters building in Manhattan presented a utility relocation problem in addition to one in international politics.

FIRST avenue, a traffic artery of the first order, goes directly past one side of the UN building site. New York traffic has a roar distinctively its own and is not the sort of thing



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## The Men behind the Machines

*"IN the final analysis it is the human element that makes for continuity of service. It is the human element which provides that little something extra that a company puts into doing its job. The diligence of a field engineer, the care of a steam shovel operator, the earnestness of a worker and his tool cart putting in an extra hour of work and missing dinner with his own family so that some other hearth will have electricity that night. Those are the elements which have made electricity the accepted thing, the forgotten miracle of the day."*

one likes to have alongside an orderly conference, so it was decided to make a tunnel out of the avenue alongside the site. Remodeled First avenue will run through a 7-block tunnel and a promenade will appear in place of the onrushing trucks beside the UN headquarters. But the subterranean passageway obliterates the old subsurface areas in which were buried electric, telephone, and telegraph cables, gas and steam mains, fire department alarm cables, water pipes, and sewers. Everything had to get out of the way.

The manner in which the relocation was handled is typical of how these problems are settled in New York. It all began with a meeting of representatives from each group involved. The situation was outlined and engineers of the utilities and the city departments affected went to work.

The pipes and cables were regrouped (on paper) at either side of the proposed tunnel. There were more meetings, arguments, drafts and redrafts, revisions of revisions until at last order emerged from the chaos. While the tunnel is only seven blocks long, the relocation of the various services is not a cheap proposition. The job runs into the millions of dollars.

Comparable meetings have been held so many times in recent years that the emissaries of the various groups with interests under the streets are now on a first-name basis with each other. The approaches to the Brooklyn-Battery tunnel recently opened are

depressed roadways where the cars pass through space formerly occupied by various ducts and pipes. Similar sunken approaches are under construction for the George Washington bridge.

THE utility companies, in working out these problems, make every effort to be fair. The companies even try to look after the interests of each individual customer as if he were the proverbial sparrow in the biblical tale. But in some cases the customer takes on a hawk-like appearance. Utilities are community leaders and there is a type of individual who feels that companies with such stature should be forced to pay a little more than a fair price.

There are times, however, when this element of human nature works out to mutual advantage. The arterial highways being built in many communities today often avoid interference with existing road patterns by advancing at a lower level. This permits the existing roads to stay in business by means of bridges over the new expressway. In the case at hand, such a new traffic artery was under construction and the highway contractor had worked out a way to build the cross-over bridges a half at a time so that traffic could keep using at least one lane during the job.

It was necessary to keep the electric cables buried under this particular roadway in service during the construction so that customers residing on the far side of the expressway-to-be could be supplied. To avoid the expense of relocating the cables temporarily under one side of the road and then moving them back to a permanent position in the bridge structure, it was determined to run them up poles and make an aerial span over the construction project until it was finished.

BUT the only place where the poles could be placed was on private property and the permission of a large landowner was required. This individual was quite unenthusiastic about the idea, but after much urging finally gave his consent. The pole truck backed onto his land, raised its rig, and broke a branch on what turned out to be the man's favorite shade tree.

Immediately, the air turned a pastel blue, the crew was ordered off the property, and there were extended conversations about tree surgeons and lawyers and juries. An adept negotiator for the company found the Achilles heel of the problem. The landowner was even more interested in juvenile delinquency than he was in shade trees. For years he had harbored an ambition to turn part of his property into a ball park for underprivileged children. A company bulldozer did the job in half a day.

The incident of the broken branch was forgotten and the cables were strung from their poles. Counting in the cost of the bulldozer, the aerial crossing still showed a substantial saving over the possible alternatives. The company saved money and the community received a junior-size ball park where the activities of the young ones must have tired them enough to reduce somewhat the incidence of broken windows in the neighborhood.

In the instance of the bridge, it was possible to provide continuous service to a large number of customers through the cables stretched over the construction work. But difficulties



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often arise where service to a single customer is jeopardized.

In these cases it is the enthusiasm of individual employees and a determination to see the job well done that make continuous service possible. A man will stay on the job an hour or so past his regular quitting time in order to clear a clogged service pipe, run in the wire, and keep the customer's refrigerator running during the night. The employee will do this as a part of the job, and not think it extraordinary in any way. "Utility service *means* continuous service," one of these workers put it. "Or as close to continuous service as we can get it. And we generally come pretty close."

TEMPORARY cables can be slung from a lamp post across the sidewalk, in by a window and down inside the house to the meter. From the lamp post the wires run down to the street mains. This temporary service while repairs or alterations are under way has made it possible for many a retail shop or restaurant to stay in business during a temporary difficulty.

On some occasions, where it has been impossible to run this temporary wiring, illumination for shoppers and diners has been provided with portable batteries on which bulbs are mounted. Designed for use in dark manhole locations, the batteries provide a certain amount of illumination when hung from the ceiling.

When the work to be done involves a transformer, it is still possible to continue service to the customers served through that unit. There is a transformer mounted on a movable rig that can be used to fill in. The unit can be adjusted so that its windings are suitable as a replacement anywhere on the system and it can be connected into a circuit to supply the load until the new wiring is complete.

In residential areas the bulk of the scheduled work is done when families can be expected to be away from home. In industrial neighborhoods, the work is done over week ends and holidays when the machinery is idle. These practices compound the difficulties of those who schedule the jobs and route the crews from project to project. But they speed up work at the site because it is easier to do this cutting and splicing when the equipment is under a minimum load. And the premium pay involved in week-end and holiday work comes home to roost in the form of improved public relations.

SOMETIMES streets are blocked off completely by new construction. Modern housing developments covering many blocks often obliterate the old street lines. In this event it is necessary to find new routes for the transmission facilities or make arrangements to maintain the facilities in place.

In New York city since VJ-Day, some eighteen miles of streets have been closed to utilities by construction of housing developments, bridge approaches, and the like. This has presented an engineering problem of major proportions. The physical task of relaying the cable is comparatively easy. New sections are put into place, and then the sections to be abandoned are cut, one by one, and spliced into the new lengths. Like a centipede which does not fall if it lifts one leg, the electric supply to the distant part of the city is not affected if only one



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of the many cables supplying the area is de-energized.

But engineers have a job and a half in finding room for the new cable lengths in many cases. There are places in New York streets where field crews have to do their digging with spoons because the cables and pipes are jammed in so closely together.

The problem is aggravated when the project is located close to a generating station and interferes with the crowded maze of cable emerging from the switching galleries. It is possible to reduce the cross section of these high-tension cables by increasing the voltage, it is true. But this step would save only a fraction of the space required under the street and would be economic suicide for a company unless plans were afoot to change the system voltage for some additional reasons.

THESE large housing projects and problems such as the First avenue tunnel entail a huge amount of paper work, but do not form the staple diet of either the engineers or the field crews entrusted with street layouts and distribution difficulties. Routine work on water mains and sewers provides the major number of individual jobs where electric facilities must be relocated. Water mains and sewers change their configurations constantly in order to conform to the new buildings and dwelling patterns of the city's residents. In each of these jobs working drawings must be prepared, field surveys made, and finally the actual excavation and relocation begun.

Even then, the unexpected is the order of the day. In parts of Manhattan it is quite common for construction crews to unearth old sections of cable originally installed under the supervision of Thomas A. Edison when he served as chief engineer of the first commercial electric company in New York. These Edison tubes have found their way into disuse.

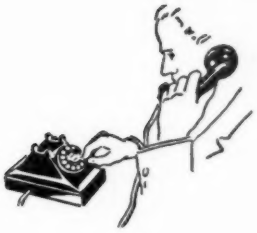
Other uncharted mementoes of bygone days are also unearthed. Recently, the gas company found one of its pipes buried under the intersection of Fifth avenue and Forty-second street, one of the busiest corners in the city. The fact that the pipe was not on the maps is not surprising when it is remembered that gas companies have been burying pipes since 1824.

Occasionally a mysterious cable is unearthed. Then, before it is cut, all the groups with cables under the streets are called in and asked if they can identify it. Telephone and telegraph companies, the Board of Transportation and the fire department, each has his own set of maps. If the cable remains unidentified, someone takes a deep breath and cuts it away.

BUT these are physical things, cables and rocks. In the final analysis it is the human element that makes for continuity of service. It is the human element which provides that little something extra that a company puts into doing its job. The diligence of a field engineer, the care of a steam shovel operator, the earnestness of a worker and his tool cart putting in an extra hour of work and missing dinner with his own family so that some other hearth will have electricity that night. Those are the elements which have made electricity the accepted thing, the forgotten miracle of the day.



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# Building Load with a Bunch of Cards

*A system successfully developed during the war for supplying industry customers with information on the location of all kinds of machine tools has been adapted to peacetime use. This service to large and small manufacturers has been produced to cover information on available factory space already connected with the electric distribution system. A ready reference card system has been set up, making possible the prompt supply of detailed data in response to telephone inquiries.*

By JAMES H. COLLINS*

During the war days of "make do," engineers of the Los Angeles Department of Water and Power discovered that special data about industry could be very valuable to the community, as well as in building load.

For example, manufacturers, large and small, were securing contracts for government work, and needed many different kinds of machine tools, or machine tool custom work. A census of machine tools was taken. Every lathe, drill, and whatnot in the area was listed by location, capacity, availability—all the necessary facts in machine tool language.

When a manufacturer with a war contract needed tools or work of a particular kind, the department could, over the phone, in a few minutes, read off from tab cards the names and phone numbers of people who had such equipment to sell, or rent, or with extra capacity for custom work. This immensely speeded up war production. And of course built load.

Another wartime list was made of available factory space hooked up to electricity. The manufacturer needing a building might have had one in view, but found that it was not connected—WPB copper restrictions forbade using even a small amount of wire, even though it might be on hand. So this list was used to locate buildings already connected.

Soon after peace, such lists were dead. But the value of special information was not lost sight of.

Today, the department has a large office housing special information about available industrial quarters and

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sites all over the city's 453 square miles, and its 10 manufacturing areas.

It is a bewildering system of punched, flagged, and classified cards, ready to one hand of a fellow holding a phone, with a "customer" on the line. Only an efficiency expert away from home would enjoy going to the bottom of it.

But fortunately, in use, it is quite simple.

Somebody calls up or writes, "I'm looking for a place to locate a factory." The department man answers, "Yes, sir—what kind of a factory, please?" and reaches for a file drawer.

The type of factory determines the zones in which it can be located. It may be a local inquiry, and the amount of floor space is given. A local inquirer will probably have a preference, stating that he wants to be in a certain area.

With three or more facts like these, out of a drawer, from a bunch of cards, the inquirer can be given various available locations, with rents, names of realty brokers who have the properties listed, and a dozen other details. Practically, the inquirer can visit these places by phone, the cards answering his main questions. It often happens that he leases and moves within a week.

But the inquiry may come from a distant manufacturer, who has the establishment of a western branch plant at the back of his mind, has had it for several years, may not make a decision for several years more.

Or it may be spoken across a desk, by an eastern executive in his own office, talking with a representative of the department.

The kind of information carried in these industrial site files is determined largely by the people who want to know this and that, why they want to know, and what questions are uppermost in their minds.

Los Angeles is not only known as the boostingest town, but its promotion activities, carried on for many years, are diversified.

Long ago the chamber of commerce became famous as an institution that lauded the land of oranges, and wooed tourists and lot-buyers.

That is actually a county accessory, supported largely by a yearly appropriation. Today it is mainly an engineering organization, charged with developing industry and trade, with tourists barred.

Another county accessory, of later origin, is the All-Year Club of Southern California, charged solely with attracting the tourists, and keeping them happy. One kind of tourist is barred to this organization—convention visitors, strictly in the chamber of commerce domain.

There is healthy rivalry between organizations as to who shall boost what, but the general result is, that Los Angeles has grown, and grown, and today growth has brought its peculiar problems.

The Department of Water and Power is a city concern, charged like a privately owned company with building load. Industries build load. Therefore the department is active in attracting manufacturing enterprises, and right along, according to the vicissitudes of business conditions, and war, and municipal budgets, has various kinds of appropriation to spend for ad-



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vertising, sometimes sizable, and again pared down—but always a little with which to do something.

With this money, the department has at times conducted advertising campaigns in business journals, or participated in eastern business shows, or bought according to its means some type of promotion to reach distant executives who may be thinking about a move.

THIS is a needle-in-the-haystack proposition at the start, as shown by what was accomplished with exhibits at two recent eastern industrial shows.

Through a sort of contest, in which crates of oranges were drawn for every day, using the names of show visitors who would register their names, business connections, and so on, the department got some 15,000 names, which were definitely run-of-the-mine—abounding in Toms, Dicks, and Harriets.

By sifting, about 1,000 names were secured for mailing purposes. Harriet the steno with John Q. Jones Corporation was clearly not an industrial prospect. But a department head in that company would be worth a little mailing activity, to get a better line on his status.

An unpromising executive paperwise can be very much worth while, as in the case of a rank-and-file salesman, who somehow was left on a mailing list, and asked for information. Not a likely individual to move a factory. But in a year he was general sales manager, and in another year a vice president who had the decision in establishing a Los Angeles branch plant.

Fully as ingenious and interesting to a utility executive is the system for sifting a large number of names into prospects, and afterwards weeding out what are called "suspects," and then finally killing the proved dead names.

There are two rules pretty closely followed. One is, to never keep a name in the live promotion list when it has proved to be a dud. And the other is, never to give up a prospect as long as there is a good chance that he will figure in the decision about a western factory.

THE "Production Expediter" is a modest mimeographed 4-page monthly newsletter gotten out for several thousand local concerns, containing production items run upon by department engineers in their work, and tagged with offers of technical service.

Example: An account of soil heating by current in agriculture is coupled

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with an offer of service to anybody with a process heating problem.

If correspondence turns up a live prospect, he will be asked if he wants to receive this publication regularly, and that sometimes builds up interest. If none is manifested, he drops off after a time—the out-of-town circulation is purposely kept small.

More elaborate is the 40-page pamphlet "F.O.B. Los Angeles," containing information enough for locating a factory—present industries, comparison with other industrial areas East and West, the location of industrial areas in the city, transportation, markets, labor supply, climate, living conditions, recreation, power, water, etc.

Through these publications, and correspondence, and with a good deal of personal study, a big general list of names is winnowed down to pay dirt at reasonable cost. Nothing eats up money like a neglected mailing list. This one is rigorously trained down.

Out of 1,000 general business names, with three or four letters and mailings, the department will obtain an average of 50 worth further work. In one case recently 2,000 better-than-average names sifted down to 160 live prospects (8 per cent). In another case, 121 names resulted in 53 prospects, 49 suspects, and 19 "kills."

THERE is no deluge of form letters. A year's mailings to proved prospects and suspects will average only 2,000 to 3,000 letters. But these are mainly personal, to executives manifesting interest in a Los Angeles plant, or one located elsewhere in the West. As long as there is a response, the name is kept among the prospects. A "suspect" will be an executive who has shown interest, then become silent. Such a name is dropped only after it is certain that there is no longer any possibility of a western plant.

This is no mass selling proposition.

When individuals have been sifted down into the prospect category, they are dealt with as persons, each with his different branch plant problems, in different stages of advancement.

People who are thinking about a branch plant, or moving a business, or establishing a factory, often have it just in the backs of their minds. It may be a long-range plan. It may be a dream. The young generation in the company wants to go West, but the oldsters are conservative. The oldsters may want to live in California, and to do it would move the business, but the youngsters believe that the best place to grow is in the East, where Dad and Grandad made their piles.

Somebody retires or dies, markets shift, the company is merged, transportation rates throw distribution out of whack, persistent shortages of raw materials necessitate developing western resources.

Practically every name on a live list has its particular story, and the Los Angeles water-power people follow that story until it comes to a happy ending—or otherwise. Years of apparent indecision may eventually lead to a new industry. Only when the sheriff closes up a prospect can the concern be definitely written off as dead.

ONCE a year or more often, department engineers go East, taking lists of names, and make contacts with prospects and suspects, by phone



Industrializing the West

*"ONCE, the West thought it was doing well if it had enough industry to bake its own bread, wash its own shirt, and manufacture enough overalls for the surrounding cowboys. That period has been outgrown. Today it works for more load, and lets the industrial newcomer take care of his competition."*

or office visits. These contacts develop late information and keep the lists alive. One department man will work by phone, calling several dozen people in a morning, while another prefers to make maybe a dozen personal calls.

Because the Old Man wanted to live in New York, many a company has moved its offices there, and the desire to live in California has moved many a factory to Los Angeles. It is a selling motive of real power.

"I've brought you something," phones the visitor.

"More statistics?" suspicions the eastern executive.

"No, a box of California oranges."

A great many good leads come into the department from California business concerns, organizations, banks, and citizens. "We happen to know that the ZYX Corporation, of Springfield, is thinking about a western plant—but this is strictly confidential."

These leads are always checked for duplication, because they get on more than one list. Generally, factory moving is regarded as deeply hush-hush. Actually, a lot of people get to know about it. Checking for duplications eliminates work, and averts hard feelings over who is to get the credit for bringing in the ZYX Corporation.

How prospects are found and dealt with has direct bearing upon the gathering, classification, and uses of data concerning industrial properties.

"Where do you want to locate, how much space do you need, do you want to rent, build, or have somebody build for you, what are your water, transportation, and similar requirements?"

These are some of the heads under



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which information is sorted and filed, ready to hand for a telephone conversation or an interview.

But there are other considerations, and they can be potent in selling.

Nowadays, the manufacturer who has long been located in an old industrial community, perhaps inherited his business, wants most of all to move into country surroundings. His business has grown so that it is crowded in some slum, hard put for space to expand. His employees put up with hardships getting to work. And there are other handicaps to escape from—taxes and costs generally.

He wants to get away from it all—or some of it. He pictures a spacious one-story plant set down in acres of cauliflower fields, with parking space enough for a World Series game, his employees in homes with half-acre gardens, his business affording a way of life as well as jobs.

IN Los Angeles, he can have all this. Thoreau said something about when you have a castle in the air, build foundations under it—that's a sales proposition for the community promoter.

Many a manufacturer already doing business in Los Angeles discovers that his plant might be better located, and comes for information. He lives in Beverly Hills, and his business is a half-hour's drive, through traffic. That tots up to a lot of bus tooling in the course of a year. He wants to bring the plant closer. Or a move to better his labor situation may be in order—in certain localities workers are mainly unskilled, while in other areas they are high-class mechanics.

Los Angeles has ten areas zoned for industry, in three classes. M-1 is allotted to limited light industry, M-2 is for light industrial, and M-3 for heavy industry. Garment making is a typical M-1 activity, an aircraft factory belongs in M-2, and plants that have fumes, odors, and the like go to M-3.

Every piece of industrial property in these ten zones is thoroughly catalogued on cards, information being obtained by personal inspection.

It may be a large factory building, or only small space for rent, or a developing area ample enough for the largest concerns.

DETAILS about the building include type of structure, area, floor space, number of stories, frontage, depth, size of lot, kind of business to which it is suited, zone, parking facilities, railroad connection, loading platforms, basement area and character, elevator, kind of floors, and any details that make it easy to quickly answer the kinds of questions prospects ask.

The neighborhood is also described—car and bus lines, nearest cross streets, kinds of industries adjacent. There are references to city maps that facilitate looking up further details.

The name of the owner, rental agent, or realty broker is listed, with phone numbers, and amount of rent. A very common inquiry is for small space at a modest rent. "We want so much floor space, it can be upstairs, but we do not want to pay more than $100 a month." In five minutes, a good choice of places to see, in any given area, can be read off the cards.

Details of electrical service are also carded—what number pole serves the



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property, nearest transformer, number of wires into the building, meter number, availability of 34,500-volt current, data giving the inquirer whatever he wants to know about power.

SUCH cards are punched for machine sorting, and run in almost innumerable ways, so that fingers may be laid on everything to rent in a given area by rental, permitted industries in the zone, floor space, transportation, and so on. Everything in the city from under 1,500 square feet up to 5,000 and over, everything by floor space, rent, zone, and whatnot in the Harbor area, or the San Fernando valley, or the East Side with its three separate industrial zones.

Every inquiry for industrial property, unless it is one immediately met, is also carded and held in the files, so that new information can be supplied as it is received. These cards give firm name, address, phone, name, and title of the person making the inquiry, preferred location, kind of products, floor or building area, type of building, parking and transportation facilities, whether the inquirer wants to rent or buy, term of lease, type of floor required, outside area, and so on.

While the department works closely with realty brokers, and obtains much information from them, it is necessary to make personal inspections of every available location, and to closely follow rentings, vacancies, and changes generally. The list that was complete when the office closed yesterday, has changed by this morning by somebody moving, renting vacant space, being burned out, or closed out.

REALTY brokers make good use of these files in seeking properties to meet the requirements of their clients. For obviously no brokerage concern can afford to keep such city-wide inventories of property. For their convenience, the department runs off special lists of kinds that have been found most useful, such as all the available locations in a given area, by rentals, floor space, and like details. Brokers phone in many inquiries, and are in effect "prospects," because they are acting for concerns that will increase the industry of the city, and the power load. No matter how much work the department may do in attracting a new industry, the time comes sooner or later when negotiations pass to brokers and owners.

The completeness and timeliness of this inventory is of definite service to other city departments, such as the Los Angeles City Planning Commission, in zoning problems, the location of schools, and other activities keyed to the city's growth, and the character of that growth, area by area.

Besides industrial space ready for rental or purchase, the department keeps close track of acreage in districts which are changing from farms to homes and factories. One such area is along the "shoestring strip," and an-

¶ "THE *Los Angeles Department of Water and Power is city-owned, and has a monopoly of power in the city, but withal, probably has as aggressive an array of competition as any utility company in the country.*"

other is in the San Fernando valley.

The shoestring is a story of a fight. Many years ago Los Angeles aspired to a harbor, and water freight rates, and was opposed by the railroads, and mobilized its citizenry for battle.

"How can you have a harbor when your town is 20 miles from the ocean?" was objected.

The answer: The city annexed a narrow strip from its border to the ocean, and that shoestring is one of the odd kinks in the shape of the town, which may be the oddest among great cities.

The shoestring ran through fields, and with industrial growth, these afforded ideal factory sites for large concerns, and have been or are being built up.

THE department is in constant touch with insurance, finance, and other companies which build for industrial concerns. Industry today has a tough problem in the financing of plant, the present tax structure restricting the setting aside of reserves for such growth. These financial interests take over, and lately the method has been adapted to small industrial concerns. Example: One financial concern developing a tract near an airport has that latest thing, the "package deal." A manufacturer needs a 10,000-square-foot factory, with ample parking space, spur track, and so on, and can afford to pay not over $500 rent per month. This company builds for him, for a down payment of $5,400, and 139 months of rental at $450 (4½ cents per square foot). In 139 months he becomes the owner of his property.

All these cards, all these inspections, all these special angles run down, such as financing a factory building—it sounds like a heavily manned organization, and corresponding expense.

The executive responsible for building it up as the postwar trends took shape is Charles C. Snyder, heading what is known as the Business Agent's Division of the department. During the early postwar years, when a vast amount of detail was being covered, he had four men pretty constantly in the field, inspecting and describing industrial properties. Today, with everything well organized, and only the work of maintenance and keeping track of changes, the job is handled by one man, who has grown up with the system, assisted by field work performed by engineers and others along with other work.

Nor does the department have a large "sales force" to visit prospects on eastern trips, and keep in touch with local concerns contemplating moving, or expansion. A department engineer or two go East every year, and take prospect lists for calls and checking up, each man having many with whom he has been working for several years. But this is part-time work for them, in connection with other activities. In the city, the same part-time arrangements are made. As nearly as it can be figured out, the local "sales" work adds up to full time of two men.

THE Los Angeles Department of Water and Power is city-owned, and has a monopoly of power in the city, but withal, probably has as aggressive an array of competition as any utility company in the country.

Picture the decision by an eastern industry that has for several years



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been pondering a move to Los Angeles, with the department working on the case all that time. If it locates in the city, the department adds load. But there is many a slip between the cup and the lip—in Los Angeles.

Within the city boundaries, entirely surrounded by the city, are separate municipalities like Beverly Hills, Culver City, and San Fernando, and, in addition, areas of unincorporated county territory such as Universal City.

If the newcomer locates in one of these places, the Southern California Edison Company gets a new customer.

ALL around the busiest Los Angeles industrial centers on the East Side, are separate municipalities, Vernon, Huntington Park, South Gate, and many others, each actively seeking new industries. The difference of one block in the chosen location may take them out of bounds as far as department load is concerned.

The shoestring is a particularly ticklish place that way, because it averages only about half a mile in width, and on either side leads off to 5-mile widths of eagerly competing communities — Inglewood, Compton, Torrance. Add thriving cities—Long Beach, Santa Monica, Alhambra.

In the San Fernando valley, which until war industry moved in was still definitely agricultural, the city really has space for growth, and the country atmosphere now sought by roving industry.

But on its eastern border there are the keenly competitive outside communities of Burbank, Glendale, Pasadena.

CITY-OWNED or private company, the battle for load seems to be about the same. Each may think the other fellow has the easiest sales job. But with the many factors that affect final decisions, it would be hard to draw a line.

Up to that final decision, until the cat is in the bag, the department uses all its experience and information. If the new factory goes out of bounds, there is the consolation that it has located in the general Los Angeles area, and that when men are hired, materials or services bought, there are no city borders.

The broad view also obtains in character of industries sought.

In the exuberant boosting of western communities for population, industry, trade, and prestige, there has generally been a home opposition, not large, but always in evidence.

"Why go after more people when we need jobs for those already here?" object these critics—generally around the time more promotion funds are being raised. "Why invite more furniture factories when we make chairs, bureaus, and beds enough for the entire West?"

The department's viewpoint on that is illustrated by a story:

Back in prewar days, when new industries were more hardly won, a furniture manufacturer located in Los Angeles, and immediately began working to bring in other furniture plants. Competition didn't seem to worry him at all.

The city then had a tidy regional furniture trade, and apparently enough factories to take care of it. But this man wanted more, and freely gave his time to attract others, assist-



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ing on their financial problems. The more competition he could create for himself, apparently, the happier he was.

To those who held the view that enough factories in a given line were perhaps too many—sheer insanity.

But he had a sound objective. A regional furniture industry did not attract buyers from the large eastern cities. Whereas one with healthy competition in design as well as products, would bring in buyers merchandising in the national market.

The city has been a national market center for a dozen years or more, and one of the largest vacant areas of land remaining near the center, the old circus lot, will soon have a new furniture mart in keeping with the magnitude of the industry.

This has been the story of the Los Angeles garment, aircraft, and other leading industries. Once, the West thought it was doing well if it had enough industry to bake its own bread, wash its own shirt, and manufacture enough overalls for the surrounding cowboys.

That period has been outgrown.

Today it works for more load, and lets the industrial newcomer take care of his competition.

## The Importance of Salesmanship

*"We can set up the most beautiful distribution machinery in the world, but it won't move goods until the salesman applies the sales power that puts it into motion.*

*"Unfortunately, sales power has lost that high-octane quality it had before the war. Salesmen have not been exempt from the softening up that for nearly ten years has plagued nearly all elements of distribution.*

*"Who is going to pull American salesmanship out of the doldrums? In the last analysis it will have to be the salesman himself. But management has the responsibility of supplying the leadership our salesmen need.*

*"The first duty of management is inspiration: to spark the creative urge to sell in our sales force, and in all elements of our distribution system. There is nothing more practical than inspiration, and nothing more impractical than a system which has not room for the human emotions which don't quite fit under the heading of 'logic.'*

*"Any large-scale improvement in the efficiency of your company's distribution techniques will not come from the Olympian analyses of the great brain who sits at the head of the organization, but from the cumulative contributions of salesmen and warehousemen and advertising men and application engineers who are each trying to do their job a little better."*

—C. H. Lang,
*Vice president, General Electric Company.*

# Washington and the Utilities



### *Lame Ducks and the Utilities*

THE 81st Congress, moving into history in another month, will enact no legislation affecting the utilities — not even an excess profits tax measure.

Despite President Truman's urgent request for an excess profits levy, retroactive to July 1st, it is not foreseeable that his plea will get much more than the completed hearings by the House Ways and Means Committee, and probable House passage.

The Senate side of Capitol Hill will not move with the same speed which may be displayed by the House. Less responsive to pressure from labor unions and the left, and not emotionally stirred by such slogans as "Take the profits out of war!" the Senate Finance Committee, headed by Senator Walter F. George (Democrat, Georgia), will hold lengthy hearings—as lengthy as possible in the short time left in the "lame duck" session.

George, a by-no-means-silent opponent of the excess profits levy, and a real student of taxation, is known to regard the excess profits tax as unwieldy as well as particularly unfair to the regulated utilities, now operating under state laws and regulations which restrict their earnings to rather limited margins in relation to unregulated businesses.

Even though Senate proponents of the excess profits levy may muster a majority — and this is doubted — that majority would not be of sufficient strength to force the proposed measure out of the Finance Committee prior to final adjournment, which probably will come about December 22nd.

In summary, it would appear that Senator Robert A. Taft (Republican, Ohio) was correct when he predicted last month that the "lame duck" session would do little more than "adjourn."

### *The New Congress and Utility Taxation*

IT is more than wishful thinking to predict that the incoming 82nd Congress will give recognition to the peculiar fixed profits position of the regulated utilities in any excess profits legislation which may be written.

The case for the utilities has been ably presented by representatives of the American Gas Association, the Edison Electric Institute, and more recently got an able "assist" from the National Association of Railroad and Utilities Commissioners. An NARUC subcommittee report on the subject demonstrated that the application of an excess profits tax similar to that of World War II to the utilities would reduce their earnings to about 3¼ per cent, a figure which would effectively block expansion as well as make public financing impossible.

Close observers of the Washington scene incline to the view that the administration may compromise in its demands for an excess profits tax and accept a straight 50 per cent corporation income tax, or a slightly smaller corporate tax, plus a "reasonable" tax on excess profits. In addition, Congress will no doubt write a rather tight contract renegotiation measure, applicable to those firms supplying defense materials and services.

Increases in the rates on personal incomes are certainties, but there is reason to believe they will not exceed the rates in effect during World War II. Experts of the Joint House-Senate Commit-



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tee on Internal Revenue Taxation are reliably reported to have cautioned the administration that World War II tax levels are the maximum the nation's economy can safely support.

## *Interior Department to Have Scrutiny*

ELECTION results bore no comfort for the Department of Interior which lost some of its staunchest congressional friends and picked up a severe critic. Two outstanding casualties were Representatives Cecil F. White and Helen Gahagan Douglas, both California Democrats.

White, a member of the House Committee on Agriculture, has been responsive to every wish of Interior in matters relating to hydro power and irrigation. A principal plank in his platform was the development of the North Fork of the Kings river by the Bureau of Reclamation as a part of the Central Valley project in the Golden state.

Representative Douglas, who lost in her bid for a seat in the upper chamber, vigorously supported the White proposal and had a bill of her own on the subject. She has consistently gone along with every wish of the Interior Department. Although Communism and Communists in government were the principal issues in her own campaign, she also made an issue of the Kings river development proposal.

The White and Douglas casualties in themselves do not constitute a broad repudiation of Interior's water resources development policies — including hydro development—but it is significant that voters of a state having some of the department's largest operations should reject these two in their bid for continuance in congressional office.

IT can be expected that Representative-elect Frank T. Bow (Republican, Ohio) will be a critic of Interior's policies, although he may not land on the Public Lands Committee. Bow is believed to have authored the charges of radical affiliation which Senator Andrew F. Schoeppel (Republican, Kansas) made against Interior Secretary Oscar L. Chapman. These charges were more or less brushed aside by Senator Joseph C. O'Mahoney (Democrat, Wyoming), Interior Affairs Committee chairman, near the end of last session.

The comparatively easy return of Representative Thomas H. Werdel (Republican, California) is another source of irritation to Interior. Presently on the Education and Labor Committee, Werdel may seek assignment to the Public Lands Committee — legislative committee handling Interior and Reclamation affairs—where the Republicans, by virtue of their House gains, will be entitled to one more seat.

## *Will FPC Stiffen toward Interior?*

IT cannot be said that results of the elections will influence the Federal Power Commission, yet the pointed defeat of Representative White of California may give the commission some pause in what appears to be something more than a tiff with the Department of Interior.

White's defeat could even be a deciding factor in a final FPC decision in the Kings river case in California. It is recalled that the commission, which had previously granted the Pacific Gas and Electric Company a license to develop the Kings river, reopened the case at the request—one might almost say, the demand—of Interior, the latter wishing to make the development a part of the Central Valley project.

The commission could look upon the White defeat as ample indication that residents of the Kings river area prefer private development to public (Reclamation) development.

There may or may not be some significance in a postelection FPC examiner's decision in favor of the Virginia Electric & Power Company's application for a license for a hydro development on the

Roanoke river. This application was opposed by Interior on the ground that it would interfere with the department's over-all plan for development of the Roanoke river valley.

## *Valley Authorities*

THE valley authority idea for development of the nation's water and hydroelectric resources will get "nowhere fast" in the new Congress. For that matter, the various valley development proposals made similar "progress" with the 81st Congress. Out of half a dozen valley measures offered, only one, the Columbia Valley Administration, got to the hearing stage. And, the somewhat changed complexion of the incoming Congress indicates reintroduction of any of these measures would be futile.

Senator Robert A. Taft (Republican, Ohio), reminded at his initial postelection Washington press conference that the 81st Congress had just about killed the valley authority idea, succinctly predicted the 82nd Congress would "inter" it. Of course, Senator Taft does not and cannot speak for the new Congress or for his party, but his stature and influence on Capitol Hill are something the valley authority proponents will have to reckon with. In expressing the view that the incoming Congress would make short shrift of valley authority proposals, the Ohioan indicated he would oppose Federal spending for nondefense projects which could be put aside until our necessary military expenditures decline.

## *St. Lawrence-Niagara Rivers*

IT was pointed out to Senator Taft that Governor-elect Thomas E. Dewey (Republican, New York) had interpreted his reëlection as governor as a mandate by the people of the Empire state to press for power developments on the St. Lawrence and Niagara rivers in accordance with state plans, and without let or hindrance from Federal sources.

Senator Taft replied that he agreed the Federal government should not stand in the way of New York's plans. He said for New York to develop the two rivers, and thus relieve the Federal government of the expense and tax responsibility, seemed the "logical and economical" course, especially when one realizes the enormity of present and future defense drains upon the Federal treasury.

Dewey, in making his demand that the Federal government stand aside, said "we want the right to develop our water power at the St. Lawrence and Niagara rivers; we want the Washington administration to get out of our way; we want them to say 'yes.'"

## *REA Outlook*

THE Rural Electrification Administration will have no particular problems in or with the new Congress, but it is likely, over the long run, that it will curtail its electrification loans because of defense demands for strategic materials. For the past few weeks REA officials have been aware of this eventuality and have focused their attention upon the rural telephone program, one that will demand less materials because of REA's policy of aiding presently established rural systems in preference to new coöperative ventures which would have to "start from scratch" in so far as materials are concerned.

## *Materials for Utilities*

THE National Production Authority and the Department of Interior apparently see "eye to eye" with respect to materials—aluminum, copper, steel, etc. —for the operating utilities.

In its recent metals limitation orders, the NPA has agreed with Interior that cut-backs should not affect allotments to the utilities for the remainder of this year and until April 1, 1951. However, the cut-backs became immediately applicable to the manufacturers of electric and gas appliances, such as stoves, washing machines, irons, fans, refrigerators, etc.



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# Financial News and Comment

By OWEN ELY

## *Showdown on EPT?*

THE House Ways and Means Committee has now received from Secretary Snyder the administration proposals for an EPT to raise about $4 billion annually in taxes—about two-fifths of the probable tax increase to be sought, and one-quarter of the potential deficit in the fiscal year beginning next June, assuming the jump in military expenditures is around $20 billion. The "unseemly haste" with which the administration is trying to jam through EPT (with one week for hearings and about a month for consideration by the two houses) seems partly a hang-over from election psychology, and partly due to the pressure of organized labor which apparently sees in EPT a way to shoulder a large part of future wage increases on the Treasury. In fact, labor leaders (AFL and CIO officials) hold that a $4 billion EPT would not take a big enough bite out of profits—they favor $5-$7 billion EPT, and would make the EPT rate 85 per cent (approximately the 1945 rate) instead of 75 per cent.

The big Republican gains in the election are an added incentive to rush a half-baked EPT through the lame-duck Congress. While it appears unlikely that the proposed EPT bill can be forced through both the House and Senate in the short session, the whole fight will start over again with the 82nd Congress next January—hence it is important for business, and for the utilities in particular, to get their story across as quickly as possible, and "on the record" in one way or another.

THE fact that the EPT of World War II was about as effective as a blunderbuss in aiming at wartime profits apparently means little to many Congressmen. The facts are that it is highly inefficient as a tax measure and discriminatory as to the burden laid on different companies and industries; that it requires a huge amount of interpretation, accounting, and litigation; that it directly encourages labor waste and swollen expense accounts (subsidizing the entertainment industry in the big cities); that it taxes inventory profits and siphons off needed working capital—all these factors seem to be dissolved by the political magic of the terms "war profits" and "excess profits." The fact that both Treasury Secretary Snyder and Commerce Secretary Sawyer are reported privately

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opposed to EPT carries little weight in Democratic councils.[1]

The Republicans have proposed an alternate tax providing for either an excess profits tax or a straight corporate income tax of 55 per cent, whichever is lower, but this is not likely to make any headway in the House Ways and Means Committee, which is expected to report out the excess profits tax substantially as the administration has proposed it. It expects to send it to the House itself on December 4th, so that it can in turn be sent to the Senate by December 6th.

The Senate leader has promised to expedite action, but felt that the measure would have to reach him before the first of the month if a law was to be passed this year. The staff of the House-Senate Committee on Internal Revenue Taxation has been reported in favor of a mild EPT, along with a boost in the income tax rate; but it seems unlikely that their views will carry much weight in the present session, except perhaps in the Senate.

At the House committee hearings a long line of industry representatives opposed an EPT and favored instead "a defense profits tax" (limited to the wartime period) as an increase in the corporate tax rate, supplemented by excise taxes including perhaps a general levy on manufacturers' sales or retail sales. Leon Henderson, former New Dealer and now economic consultant to the Business Committee on Emergency Corporate Taxation (composed of over 100 business leaders) told the committee that an EPT is a "built-in barrier to new investment"; it is also inflationary and not nearly so effective, in holding down defense profits, as contract renegotiation. The New York State Chamber of Commerce favored a graduated retail sales tax, and the Committee for Constitutional Government also favors higher excise taxes.

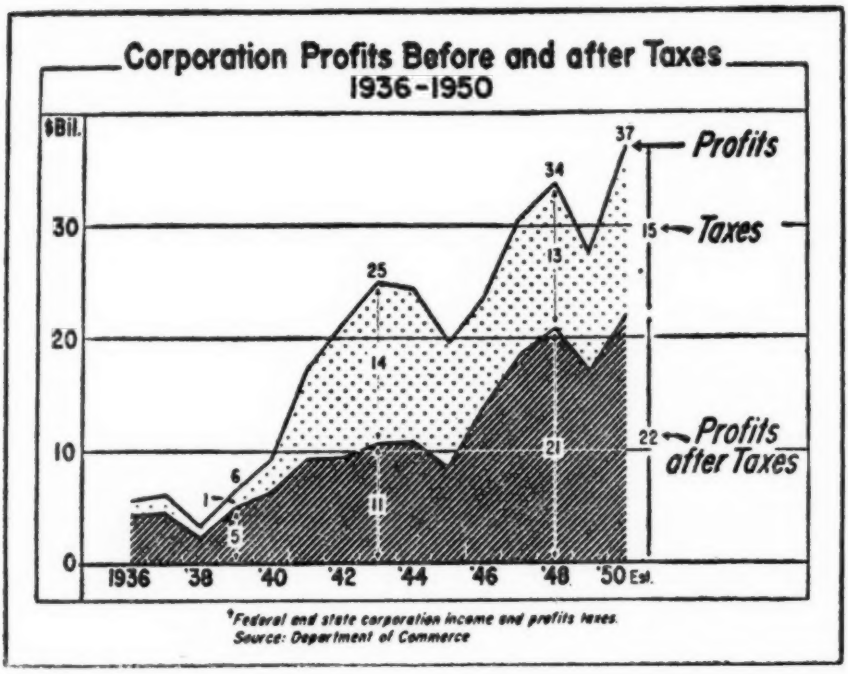
Thus it is obvious that organized business is not opposed to increased taxes at this time but it wants these to be on a logical and efficient basis. An increase in the regular income surtax rate is the simplest and easiest way to accomplish this, together with increased excise and luxury taxes to discourage unneeded consumer spending.

One of the most serious features of EPT is that it threatens to handicap the most progressive segment of business—the "growth companies." It may hamstring the construction program of the utilities while leaving the railroads almost unscathed. It will hurt the aircraft manufacturing companies which in recent years have been netting only 1.3 per cent of sales *versus* 5.4 per cent for all industry. While supposedly aimed at swollen post-Korean profits, it goes back to 1946 in setting up an index of "excess profits."

Dr. Arthur Smithies, testifying for himself and five Harvard associates, said that under an excess profits tax new and growing businesses would have relatively low base period earnings or none at all, and frequently would possess only small amounts of invested capital. Consequently, he argued, most of their earnings would be subject to excess profits rates. "Thus an excess profits tax inevitably tends to strengthen entrenched corporations by placing what amounts to a 'freeze' on the economy and, even more seriously, to restrict severely the vitalizing contributions of new and growing businesses to the economy."

The administration's EPT proposal retains the two alternative methods of the old law. If a company elects to use the earnings method, the proposed 75 per cent tax would apply to all earnings in excess of 75 per cent of the so-called

[1] The country's corporations have an estimated $19 billion of profits tied up in inventories. In the first half of 1950 alone, inventory "profits" were $2.3 billion. Since these inventories must be replaced at going prices, these profits are unrealizable—yet they are subject to taxation, which renders replacement more difficult. Also, a substantial proportion of "profits" now being reported must be used to replace at much higher prices old plants, worn out or obsolescent. If these profits are taxed at the suggested excess profits rate many concerns will find it difficult to make necessary replacements.




"normal" amount, which would be an average of the three most profitable years in the 4-year period 1946-49. The regular 45 per cent income tax rate would apply to the income not thus taxed.

The tax is obviously more than an "excess profits" tax, since it is levied on 25 per cent of the so-called normal earnings as well as on the excess earnings. This is apparently a subterfuge designed to avoid the very high EPT tax rate (90-100 per cent) which would otherwise be necessary to raise the desired funds. But the same result could be accomplished far more easily by raising the corporate tax rate to 50 per cent or more, and thus avoiding the unfair penalties against certain industries such as utilities, television, aircraft, etc., and against rapid growth companies in all industries.

SOME effort has ostensibly been made in the new bill to temper the application of EPT to the heavily bonded utilities and railroads. The text is not available at this writing, but according to Dow-Jones the new provisions would allow a corporation to report its invested capital (if it used that option) without including any borrowed funds. An excess profits tax exemption would then be computed at percentages ranging from about 10 per cent for the first $5,000,000 of capital down to about 7 per cent for the principal amount. To the resulting amounts could be added another small credit, not exceeding 2 per cent of the total exemption.

In the 1945 law taxpayers were allowed to include only half of borrowed capital in the investment, and only half of their interest payments in their reported earnings. This had the effect of increasing the over-all rate of return "earned" by the utility from about 6 per cent to 7 per cent—thus about doubling the amount of taxable earnings in excess of the 5 per cent exemption (on capital of over $10,000,000).

Under the old EPT most utilities used



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an earnings base instead of an invested capital base. Will they be able to do better in the present instance by resorting to the investment capital base? The new provision in the Treasury proposal will eliminate debt almost entirely in the calculation, and will allow two offsetting factors—exemption rates about 30 per cent higher than the old, plus the small credit.

For the average medium-sized electric utility with capital of $100,000,000, the picture looked about as follows, disregarding minor adjustments. The company earns about 6 per cent on its capital under state regulation, which is apportioned as follows:

| | *Capital in Millions* | *Cost of Capital Per Cent* | *Millions* |
|---|---|---|---|
| Debt ..... | $50 | 3% | $1.5 |
| Preferred Stock ... | 15 | 4 | .6 |
| Common Stock .... | 35 | 11 | 3.9 |
| Total or Aver. .. | $100 | 6% | $6.0 |

After application of the 1945 EPT, earnings as reported for tax purposes looked like this:

| | *Capital in Millions* | *Amt. Earned Per Cent* | *Millions* |
|---|---|---|---|
| Debt ..... | $25 | 3% | $ .75 |
| Preferred Stock ... | 15 | 4 | .6 |
| Common Stock .... | 35 | 11 | 3.9 |
| Total or Aver. .. | $75 | 7% | $5.25 |

THE average exemption allowed under the old EPT was about 5¼ per cent on the reported capital investment, as compared with the 7 per cent earned above whereas if debt had not been cut in half the exemption would have been 5¼ per cent *versus* 6 per cent earned. Thus the taxable income was increased by the use of this device from $750,000 to about $1,300,000 — resulting in an increase of 75 per cent in the tax.

The new administration proposal would apparently allow a total exemption (including the interest credit) of roughly 7 per cent for our $100,000,000 utility instead of 5.2 per cent, which would make the picture look about as shown in the following table:

| | *Capital in Millions* | *Amt. Earned Per Cent* | *Millions* |
|---|---|---|---|
| Debt ..... | — | — | — |
| Preferred Stock ... | 15 | 4 | .6 |
| Common Stock .... | 35 | 11 | 3.9 |
| Total ..... | $50 | 9% | $4.5 |

Under the new setup the estimated taxable income would be about 2 per cent on $50,000,000, or $1,000,000 taxable income—some improvement over 1945, but still a handicap for the utility company as compared with the average industrial company, which has little or no debt.

How would the proposed tax compare with the 1945 tax, for electric utilities? Assuming a 1950 invested capital base were used by all electric utilities, the setup would be about as follows: debt $9.5 billion, preferred stock $3 billion, and common stock equity $6.5 billion (50-16-34 per cent). The exemption would approximate 7 per cent of $9.5 billion (total preferred and common stock) or about $665,000,000. In the twelve months ended June 30th total Federal income tax payments by electric utilities approximated $372,000,000 which with a 38 per cent rate effective would indicate taxable income as reported to the Treasury Department of around $1 billion (as compared with about $1.2 billion earnings as reported to the FPC). On this basis, taxable income in excess of the EPT exemption would approximate $335,000,000, and 75 per cent of this would make the EPT tax $250,000,000. This amount would compare with total EPT of about $187,000,000 in each of the war years 1943-44, and $154,000,000 in 1945.

ADJUSTING Federal income taxes from a 38 per cent to a 45 per cent rate for the calendar year 1951 would mean an income tax approximating $300,000,000 (on the exempt portion of $1 billion income) resulting in total taxes on income of $550,000,000. This compares with the maximum wartime taxes of $384,000,000 in 1944.

*Such taxes would mean a reduction of at least 25 per cent in the balance available for common stockholders—and much more for some utilities.* Most in-

dustrial companies could "stand" such a cut because dividend pay-outs are rather low in relation to recent huge earnings; but for the utilities, which benefit little from wartime conditions because their increased industrial sales bring in only a negligible profit, such a cut in earnings would mean that many present dividend rates would be jeopardized. The results will be reflected in market quotations, the same as would drastic rate cuts, and the difficulties of selling $2 billion of new stock may prove almost insuperable.

EDWARD H. COLLINS, financial editorial writer for *The New York Times*, in the November 20th issue wrote an excellent summary on "EPT (the 'P' Is for Politics)." After describing the history of taxation in World Wars I and II, he stated "the excess profits law of World War II [developed] numerous shortcomings in practice, but it rested, at least, on two sound foundation principles . . . One of these was the principle that a nation cannot subject corporations to steep wartime excess profits taxes until the economy has taken on a full wartime character. Unless prices are ceilinged such taxes will eventually be passed along in whole or part to the consumer. . . . The second principle is that such a tax must be a 'war profits' tax, and not a 'high profits' tax . . . [Yet the Secretary of the Treasury submitted] a tax which purported to be a wartime excess profits tax, but which flagrantly violated both of the essential principles of such a tax; and a ruling by the (House) committee . . . [provided] that no testimony would be admitted which departed essentially from the incongruous and sadistic version of the excess profits tax introduced by the administration.

"The proposal of the Secretary of the Treasury calls for a 75 per cent impost, which is a rate that could be justified, even if it were confined to windfall profits, only in an economy that was functioning under price and wage controls. But that is only part of the indictment. Because of a 'sleeper' in this measure (a single paragraph at the bottom of page 18 of Mr. Snyder's 19-page statement to the committee) the real effect of the plan would be to take as a basis for the tax, not the years 1946-1949, the ostensible 'base period,' but the last war year, 1945. That is the effective result produced by this 'sleeper' provision, which would exempt recent peacetime earnings from the effects of the tax only up to 75 per cent. The Snyder proposal is so set up as to appear comparatively innocuous; actually it would raise the tax burden on American corporations, even at this early stage of the arms effort, to a level well above that to which they were subjected at the peak of World War II. It would do this because it is not a real war profits tax, but a war profits tax superimposed upon a dis-

UTILITY SECURITIES—CURRENT "YIELD YARDSTICKS"

| | Recent | 1950 Range High | 1950 Range Low | 1949 Range High | 1949 Range Low |
|---|---|---|---|---|---|
| U. S. Long-term Bonds—Tax-exempt | 1.34% | 1.38% | 1.24% | 1.82% | 1.36% |
| —Taxable | 2.38 | 2.40 | 2.15 | 2.40 | 2.14 |
| Utility Bonds—Aaa | 2.65 | 2.68 | 2.55 | 2.77 | 2.56 |
| —Aa | 2.71 | 2.74 | 2.63 | 2.84 | 2.64 |
| —A | 2.85 | 2.87 | 2.75 | 3.02 | 2.77 |
| —Baa | 3.21 | 3.21 | 3.14 | 3.45 | 3.15 |
| Utility Preferred Stocks—High Grade | 3.78 | 3.82 | 3.70 | 4.02 | 3.80 |
| —Medium Grade | 4.23 | 4.23 | 4.13 | 4.57 | 4.19 |
| Utility Common Stocks | 6.00 | 6.14 | 5.31 | 6.26 | 5.58 |

Latest available Moody indexes are used for utility bonds and preferred stocks; Standard & Poor's indexes for government bonds and utility common stocks.

guised increase in the regular corporate income tax."

It is hoped that the tax position of the utilities in Congress will be strengthened by the special efforts of the joint EEI-AGA committee in presenting its well-prepared story to the House committee. However, the recommendations of NARUC may carry more weight since that organization is not normally pro-utility. A special NARUC committee, headed by Commissioner Justus F. Craemer of the California commission, urges that Congress consider the "reasonable return" fixed by the regulatory commissions as the basis for computing normal and reasonable earnings before levying an excess profits tax.

## *Outlook for Utility Financing In 1951-53*

VICE President Busch of General Public Utilities, at a recent accounting conference of the Southeastern Electric Exchange, presented an interesting statistical summary as to the construction programs and financing needs of all U. S. electric, gas, and telephone companies during 1951-53. The electric companies are expected to spend $2.3 billion in each year and the telephone companies $1.25 billion. The gas industry, while planning to spend about $1 billion next year, will curtail to about $.4 billion in 1952 and $.3 in 1953.

Some 30-40 per cent of all this money can be generated internally through depreciation accruals, retained earnings, etc., he estimated, with the balance to be raised through the sale of new securities. The electric and telephone companies would raise half of the amount through debt securities, and the gas companies some 60 per cent. As to preferred stock sales, the electric companies would issue only 5 per cent and telephone companies about 4 per cent. Both electric and gas companies would raise 35 per cent of their needs through common stock sales, while the telephone companies would raise 46 per cent.

Regarding the sale of debt securities, Mr. Busch pointed out that the large life insurance companies have increased their holdings of utility bonds by over $1.8 billion in 1948 and over $1 billion in 1949. Since these companies have some $4 billion cash to invest annually there would seem to be an ample market for new utility debt securities.

REGARDING life insurance companies' purchases of preferred stocks, these were comparatively small in 1947-48 but in 1949 amounted to $125,000,000 (net) and in the first half of this year were at the annual rate of $174,000,000. With the increased demand from other institutional buyers such as pension funds, fiduciary trustees, etc., the utilities could probably sell their estimated amounts of about $300,000,000 in 1951 and somewhat smaller amounts in the two years following.

Of the equity financing considered necessary in 1951, Mr. Busch estimated that the electric and gas companies would sell about $800,000,000 common stock, while the telephone companies would sell about $300,000,000 convertible debentures (which are popular with certain institutions), with only about $50,000,000 straight equity financing. Where would these common stocks be placed? Life insurance companies increased their holdings of utility common stocks by only $7,000,000 in 1948 and $17,000,000 in 1949, but in the first half of 1950 their holdings were increasing at the annual rate of $54,000,000. The investment trusts now own an estimated $1.4 billion common stocks, but only about $110,000,000 (8 per cent) of these are utility stocks. These companies are probably increasing their investments at the rate of about $300,000,000 a year, based on the growth in the past three years. On this basis investment trusts might be expected to absorb some $25,000,000 a year in utility stocks, we estimate on the basis of Mr. Busch's data. While other institutions such as pension and trust funds and British-Scotch trusts would also take some utility common stocks, it seems obvious that most of the utility sales must continue for the present to be made to



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individuals — largely to present stockholders through subscription rights. In 1949 the electric and gas companies successfully sold $623,000,000 common stock and in the first half of 1950 sales were at an annual rate of $720,000,000.

## CURRENT UTILITY STATISTICS AND RATIOS

| | Unit Used | Amount Latest Month | Amount Latest 12 Mos. | Per Cent Increase Latest Month | Per Cent Increase Latest 12 Mos. |
|---|---|---|---|---|---|
| ***Operating Statistics (September)*** | | | | | |
| Output KWH—Total | Bill. KWH | 27.8 | 315.2 | 16% | 9% |
| Hydro-Generated | " | 7.5 | — | 8 | — |
| Steam-Generated | " | 20.3 | — | 20 | — |
| Capacity | Mill. KW | 66.9 | — | 11 | — |
| Peak Load (August) | " | 55.3 | — | 12 | — |
| Fuel Use: Coal | Mill. tons | 7.8 | — | 18 | — |
| Gas | Mill. MCF | 60.3 | — | 12 | — |
| Oil | Mill. bbls. | 6.0 | — | 2 | — |
| Coal Stocks | Mill. tons | 29.6 | — | 5 | — |
| ***Customers, Sales, Revenues, and Plant (August)*** | | | | | |
| KWH Sales—Residential | Bill. KWH | 3.7 | 48 | 10% | 12% |
| Commercial | " | 3.4 | 38 | 8 | 8 |
| Industrial | " | 10.5 | 110 | 22 | 5 |
| Total, incl. misc. | " | 24.2 | 271 | 13 | 6 |
| Customers—Residential | Mill. | 28.3 | — | 5 | — |
| Commercial | " | 4.2 | — | 3 | — |
| Industrial | " | .5 | — | 5 | — |
| Total | " | 35.2 | — | 4 | — |
| ***Income Account—Summary (August)*** | | | | | |
| Revenues—Residential | Mill. $ | 113 | 1,434 | 9% | 10% |
| Commercial | " | 93 | 1,075 | 7 | 7 |
| Industrial | " | 116 | 1,264 | 16 | 4 |
| Total, Incl. Misc. Sales | " | 359 | 4,172 | 10 | 7 |
| Sales to Other Utilities | " | 32 | 379 | 4 | D1 |
| Misc. Income | " | 8 | 201 | 20 | 14 |
| ***Expenditures*** | | | | | |
| Fuel | " | 68 | 725 | 12% | D2% |
| Labor | " | 78 | 890 | 8 | 5 |
| Misc. Expenses | " | 209 | 771 | 7 | 2 |
| Depreciation | " | 36 | 418 | 13 | 11 |
| Taxes | " | 78 | 856 | 24 | 12 |
| Interest | " | 22 | 254 | 6 | 8 |
| Amortization, etc. | " | 1 | 22 | D8 | D2 |
| Net Income | " | 53 | 818 | — | 12 |
| Preferred Div. (Est.) | " | 9 | 108 | — | 8 |
| Bal. for Common Stock (Est.) | " | 44 | 710 | — | 15 |
| Common Dividends (Est.) | " | 41 | 489 | 11 | 16 |
| Balance to Surplus (Est.) | " | 3 | 221 | — | 73 |
| ***Electric Utility Plant (August)*** | " | 18,408 | — | 10% | — |
| Reserve for Deprec. and Amort. | " | 3,809 | — | 8 | — |
| Net Electric Utility Plant | " | 14,599 | — | 11 | — |
| ***Utility Financing (September)**** | | | | | |
| Bonds | " | 112 | 2,029 | 93% | 21% |
| Stocks | " | 25 | 582 | D48 | 23 |
| Total | " | 137 | 2,611 | 30 | 22 |
| ***Life Insurance Investments (January 1st-November 11th)*** | | | | | |
| Utility Bonds | " | — | 1,112 | — | 32% |
| Utility Stocks | " | — | 163 | — | 92 |
| Total | " | — | 1,275 | — | 37 |
| Per Cent of All Investments | " | — | 19% | — | 1 |

D—Decrease. *Data for all utilities (electric, gas telephone, etc.), including refunding issues. **Nine months ended September 30th.

## RECENT FINANCIAL DATA ON GAS COMPANY STOCKS

| | | 11/16/50 Price About | Indicated Dividend Rate | Approx. Yield | Share Earnings# Cur. Period | Prev. Period | % Increase | Price-Earnings Ratio | Div. Payout |
|---|---|---|---|---|---|---|---|---|---|
| ***Natural Gas—Retail*** | | | | | | | | | |
| C | Arkansas Natural Gas | 11 | $ .60 | 5.5% | $1.26d | $1.44 | D6 | 8.7 | 48% |
| O | Atlanta Gas Light | 23 | 1.20 | 5.2 | 2.23je | 1.82 | 23 | 10.3 | 54 |
| O | Central Elec. & Gas | 10 | .80 | 8.0 | 1.14ag | 1.03 | 11 | 8.8 | 70 |
| S | Columbia Gas System | 12 | .75 | 6.3 | 1.15s | .81 | 42 | 10.4 | 65 |
| C | Consol. Gas Util. | 12 | .75 | 6.3 | 1.48ju | 1.72 | D14 | 8.1 | 51 |
| S | Consol. Nat. Gas | 47 | 2.00 | 4.3 | 4.69s | 3.51 | 34 | 10.0 | 43 |
| S | Equitable Gas | 21 | 1.30 | 6.2 | 2.15s | — | — | 9.8 | 60 |
| O | Houston Nat. Gas | 15 | .80 | 5.3 | 1.06ju | 1.45 | D27 | 14.2 | 75 |
| O | Indiana Gas & Water | 21 | 1.20 | 5.7 | 2.13s | 1.64 | 30 | 9.9 | 56 |
| O | Kansas-Neb. Nat. Gas | 17 | 1.10 | 6.5 | 1.63d | 1.55 | 5 | 10.4 | 67 |
| S | Laclede Gas | 7 | .20 | 2.9 | .80s | .67 | 19 | 8.8 | 25 |
| C | Lone Star Gas | 25 | 1.20 | 4.8 | 2.15s | 1.74 | 24 | 11.6 | 56 |
| O | Minneapolis Gas | 17 | 1.00 | 5.9 | 1.55s | .86 | 80 | 11.0 | 65 |
| O | Mission Oil | 39 | 2.20 | 5.6 | 3.60d | 2.05 | 76 | 10.8 | 61 |
| O | Mobile Gas Service | 27 | 1.60 | 5.9 | 3.03je | 2.36 | 28 | 8.9 | 53 |
| S | Montana-Dakota Util. | 12 | .80 | 6.7 | 1.36s | 1.36 | — | 8.8 | 59 |
| C | National Fuel Gas | 12 | .80 | 6.7 | 1.20s | .74 | 62 | 10.0 | 67 |
| O | National Gas & Oil | 6 | .40 | 6.7 | .58d | 1.40 | D59 | 10.3 | 69 |
| C | Okla. Natural Gas | 29 | 2.00 | 6.9 | 3.00ag | 3.38 | D11 | 9.7 | 67 |
| S | Pacific Lighting | 50 | 3.00 | 6.0 | 5.01s | 3.18 | 58 | 10.0 | 60 |
| C | Pacific Pub. Service | 14 | 1.00 | 7.1 | 2.08d | 3.21 | D50 | 6.7 | 48 |
| S | Peoples Gas L. & Coke | 117 | 6.00 | 5.1 | 10.67s | 6.84 | 56 | 11.0 | 56 |
| C | Rio Grande Valley | 2 | .12 | 6.0 | .19d | .20 | — | 10.5 | 63 |
| O | Rockland Gas | 35 | 1.70 | 4.9 | 4.41d | 2.73 | 62 | 7.9 | 39 |
| O | Southern Union Gas | 20 | .80 | 4.0 | 1.58je | — | — | 12.7 | 51 |
| O | Southwest Nat. Gas | 6 | (a) | — | .28s | .22 | 27 | 21.4 | — |
| S | United Gas | 19 | 1.00 | 5.3 | 1.54s | 1.30 | 18 | 12.3 | 65 |
| S | Washington Gas Light | 26 | 1.50 | 5.8 | 3.26s | 1.10 | 196 | 8.0 | 46 |
| | Averages | | | 5.8% | | | | 10.4 | |
| ***Natural Gas—Wholesale and Pipeline*** | | | | | | | | | |
| S | American Natural Gas | 29 | $1.20 | 4.1% | $2.27s | $1.44 | 58 | 12.8 | 53% |
| O | Commonwealth Gas | 10 | .15 | 1.5 | .62d | .68 | D9 | 16.1 | 24 |
| S | El Paso Nat. Gas | 24 | 1.40 | 5.8 | 1.90s | 1.84 | 3 | 12.6 | 74 |
| O | Interstate Nat. Gas | 35 | 2.50 | 7.1 | 2.50d | 2.03 | 23 | 14.0 | 100 |
| O | Mississippi River Fuel | 34 | 2.00 | 5.9 | 3.24s | 1.99 | 63 | 10.5 | 62 |
| O | Missouri-Kansas P.L. | 43 | 1.60 | 3.7 | 4.24d | 1.32 | 221 | 10.1 | 38 |
| O | Mountain Fuel Supply | 17 | .60 | 3.5 | .91d | .91 | — | 18.7 | 66 |
| S | Northern Nat. Gas | 30 | 1.80 | 6.0 | 2.53je | 2.35 | 8 | 11.9 | 71 |
| S | Panhandle East. P.L. | 44 | 2.00 | 4.5 | 2.66s | 2.36 | 13 | 16.5 | 75 |
| S | Southern Nat. Gas | 36 | 2.30 | 6.4 | 3.87s | 3.00 | 29 | 9.3 | 59 |
| O | Tenn. Gas Trans. | 25 | 1.40** | 5.6 | 1.46s | 1.24 | 18 | 17.1 | 96 |
| O | Texas East. Trans. | 17 | 1.00 | 5.9 | 1.80s | 1.41 | 28 | 9.4 | 56 |
| O | Texas Gas Trans. | 16 | — | — | 1.18je | .76 | 55 | 13.6 | — |
| | Averages | | | 5.0% | | | | 13.3 | |
| ***Manufactured Gas—Retail*** | | | | | | | | | |
| C | Bridgeport Gas | 23 | $1.40 | 6.1% | $1.88d | $1.60 | 18 | 12.2 | 74% |
| O | Brockton Gas Lt. | 20 | 1.40 | 7.0 | 1.48d | .43 | 244 | 13.5 | 95 |
| S | Brooklyn Union Gas | 36 | 2.25 | 6.3 | 4.39m | — | — | 8.2 | 46 |
| O | Hartford Gas | 35 | 2.00 | 5.7 | 2.67d | 1.85 | 44 | 13.1 | 75 |
| O | Haverhill Gas Lt. | 29 | 1.80 | 6.2 | 1.96s | 2.16 | D9 | 14.8 | 92 |
| O | Jacksonville Gas | 30 | 1.40 | 4.7 | 4.77d | 6.12 | D22 | 6.3 | 29 |
| C | Kings County Ltg. | 8 | .40 | 5.0 | .64d | — | — | 12.5 | 63 |
| O | New Haven Gas Light | 27 | 1.60 | 5.9 | 1.70d | 1.76 | D4 | 15.9 | 94 |
| O | Providence Gas | 9 | .60 | 6.7 | .56d | .73 | D30 | 16.1 | 107 |
| O | Seattle Gas | 13 | .60 | 4.6 | 1.49d | .70 | 113 | 8.7 | 40 |
| O | South Jersey Gas | 13 | — | — | .41d | .38 | 9 | — | — |
| S | United Gas Improvement | 27 | 1.40 | 5.2 | 2.05s | 1.91 | 7 | 13.2 | 68 |
| | Averages | | | 5.8% | | | | 12.2 | |

## RECENT FINANCIAL DATA ON TELEPHONE, TRANSIT, AND WATER COMPANIES

| | | 11/16/50 Price About | Indicated Dividend Rate | Approx. Yield | Share Earnings# Cur. Period | Prev. Period | % Increase | Price-Earnings Ratio | Div. Payout |
|---|---|---|---|---|---|---|---|---|---|
| ***Communications Companies*** | | | | | | | | | |
| | *Bell System* | | | | | | | | |
| S | Amer. Tel. & Tel. | 151 | $9.00 | 6.0% | $11.98ag* | $8.91* | 34% | 12.6 | 75% |
| O | Cinn. & Sub. Bell Tel. | 69 | 4.50 | 6.5 | 4.80d | 3.76 | 28 | 14.4 | 94 |
| C | Mountain St. T. & T. | 101 | 6.00 | 5.9 | 7.02s | 6.86 | 2 | 14.4 | 85 |
| C | New England Tel. | 96 | 4.75 | 4.9 | 11.36s | 5.85 | 94 | 8.5 | 42 |
| S | Pacific Tel. & Tel. | 102 | 7.00 | 6.9 | 8.55ag* | 6.08* | 41 | 11.9 | 82 |
| O | So. New Eng. Tel. | 33 | 1.80 | 5.5 | 2.05d | 1.91 | 7 | 16.1 | 88 |
| | Averages | | | 6.0% | | | | 13.0 | |
| | *Independents* | | | | | | | | |
| O | Central Telephone | 11 | $ .80 | 7.3% | $1.23s | $1.18 | 4% | 8.9 | 65% |
| S | General Telephone | 28 | 2.00 | 7.1 | 2.11s | 1.55 | 36 | 13.3 | 95 |
| C | Peninsular Tel. | 42 | 2.50 | 6.0 | 4.69d | 4.71 | — | 9.0 | 53 |
| O | Rochester Tel. | 11 | .80 | 7.3 | 1.62ag | — | — | 6.8 | 49 |
| ***Transit Companies*** | | | | | | | | | |
| O | Chicago S.S. & S.B. | 11 | $1.00 | 9.1% | $ .91d | $1.40 | D35% | 12.1 | 110% |
| O | Cinn. St. Ry. | 5 | .30 | 6.0 | .84d | .77 | 9 | 7.0 | 36 |
| O | Dallas Ry. & Term. | 10 | 1.40 | 14.0 | 1.39d | 2.27 | D39 | 7.2 | 101 |
| O | Duluth Sup. Trans. | 4 | — | — | .79d | .44 | 80 | 5.1 | — |
| S | Greyhound Corp. | 10 | 1.00 | 10.0 | 1.31s | 1.35 | D3 | 7.6 | 76 |
| O | Los Angeles Transit | 4 | .50 | 12.5 | .84d | .93 | D10 | 4.8 | 60 |
| S | Nat. City Lines | 9 | 1.00 | 11.1 | 1.75d | 1.97 | D11 | 5.1 | 57 |
| O | St. Louis P.S. A | 7 | .50 | 7.0 | .48d | .70 | D31 | 14.6 | 104 |
| O | Syracuse Transit | 18 | 2.00 | 11.1 | .62d | 1.40 | D13 | — | 323 |
| O | United Transit | 3 | — | — | .55d | .13 | 246 | 5.5 | — |
| | Averages | | | 10.1% | | | | 7.7 | |
| ***Water Companies*** | | | | | | | | | |
| | *Holding Companies* | | | | | | | | |
| S | Amer. Water Works | 9 | $ .60 | 6.7% | $1.01s | $ .92 | 10% | 8.9 | 59% |
| O | N. Y. Water Service | 168 | 4.00 | 2.4 | 10.67je | 6.19 | 72 | 15.7 | 37 |
| | *Operating Companies* | | | | | | | | |
| O | Bridgeport Hydraulic | 32 | $1.60 | 5.0% | $1.57d | $1.78 | D12% | 20.4 | 102% |
| O | Calif. Water Serv. | 27 | 2.00 | 7.4 | 2.76s | 2.42 | 14 | 9.8 | 72 |
| O | Elizabethtown Water | 106 | 6.00 | 5.7 | 8.37d | 6.89 | 21 | 12.7 | 72 |
| S | Hackensack Water | 31 | 1.70** | 5.5 | 3.35d | 2.79 | 20 | 9.3 | 51 |
| O | Indianapolis Water | 18 | .80 | 4.4 | 1.33d | 1.42 | D6 | 13.5 | 60 |
| O | Jamaica Water Supply | 22 | 1.50 | 6.8 | 1.76s | .67 | 163 | 12.5 | 85 |
| O | Middlesex Water | 53 | 3.00 | 5.7 | 4.87d | 4.94 | D2 | 10.9 | 62 |
| O | New Haven Water | 58 | 3.00 | 5.2 | 3.45d | 3.61 | D4 | 16.8 | 87 |
| O | Ohio Water Serv. | 19 | 1.50 | 7.9 | 1.67je | 2.15 | D22 | 11.4 | 90 |
| O | Phila. & Sub. Water | 25 | .80 | 3.2 | 3.49d | 3.01 | 16 | 7.2 | 23 |
| O | Plainfield Union Wt. | 64 | 4.00 | 6.3 | 5.09d | 5.02 | 1 | 12.6 | 79 |
| O | San Jose Water | 32 | 2.00 | 6.3 | 2.96s | 2.81 | 5 | 10.8 | 68 |
| O | Scranton-Spring Brook | 12 | .70 | 5.8 | 1.08je | .81 | 33 | 11.1 | 65 |
| O | Southern Cal. Water | 9 | .65 | 7.2 | .73s | .79 | D8 | 12.3 | 89 |
| O | Stamford Water | 55 | 2.00 | 3.6 | 2.35d | 2.21 | 6 | 23.4 | 85 |
| O | West Va. Wt. Service | 15 | 1.20 | 8.0 | 1.22s | 1.38 | D12 | 12.3 | 98 |
| | Averages | | | 5.9% | | | | 12.9 | |

D—Deficit. C—Curb Exchange. O—Over-counter or out-of-town exchange. S—New York Stock Exchange. *Based on average number of shares outstanding. **Also 25 per cent stock dividend. †Based on shares outstanding June 30th. # In order to facilitate comparisons, earnings are calculated on present number of shares outstanding, except as otherwise indicated. (a) Stock dividend of 50 per cent payable July 1st, and cash of 10 cents payable same date (on new stock): 25 cents paid in 1949. d—December. m—March. ap—April. my—May. je—June. ju—July. ag—August. s—September.



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# What Others Think



## Southeastern REA Co-op Meeting

SOME of the current opinions of national co-op leaders on important power topics are reflected in a recent report in the New Orleans *Times-Picayune* covering a regional meeting of rural electrification coöperative officials from Louisiana, Arkansas, Oklahoma, and Missouri. Also present at the meeting were Claude R. Wickard, Rural Electrification Administrator, Clyde T. Ellis, executive manager of the National Rural Electric Coöperative Association, and Clark T. McWhorter, association president.

Wickard, arguing the necessity for the portion of the REA Act providing government loans for construction of generating stations by rural electrification associations, said in some instances, especially in the Southwest, it was necessary to find a new source of power before the REA could proceed with area development because existing power sources either were too limited or too costly. He asserted:

> You've been told, that through your operations "somebody" is being put out of business. Do you know of any private electric company that is doing less business today than in the past?
>
> On the contrary, you have developed new markets for electric energy, and where ten years ago the REA's were spending $2,000,000 in the purchase of power from private companies, they are today spending $50,000,000. They ought to stop talking that way, because there is more business today than either side can handle.
>
> The fight is getting stronger because your demand is increasing. Your business is getting more prosperous. You are showing them how cheaply plants can be built and power can be distributed. The question is whether the people are going to continue to get the benefits of hydroelectric development.

Wickard warned the coöperatives that they must avoid going beyond congressional limitations in making application for generating and transmission loans. He outlined recent congressional action on the subject:

> The Senate committee report on the Appropriations Bill brought out the fact that much more money was currently going for generation and transmission loans than in previous years, and suggested that REA should not make loans for generation and transmission facilities, unless the power companies in the area are unwilling to make power available at reasonable rates within a reasonable time.
>
> There was discussion on the Senate floor which tended to clarify this issue but the matter was further clarified in the conferees' report which was adopted in both houses. This report said the REA is expected to exercise its power generation authority only in line with its announced policy and the law.

THE top REA official then noted that the REA was more or less "on its honor" in administering this congressional interpretation of its authority. He continued:

> I think it is most helpful to have the Congress be so explicit in this controversial matter. It is also gratifying to know that the Congress has put its approval upon REA's policy on generation and transmission loans. However, I do not think we should over-

look the fact that in a manner the REA has been put on its honor to adhere strictly to its policy, and I assure you that, as we have in the past, we will conscientiously try to do that very thing.

This policy, as you know, calls for making loans for generation and transmission facilities only when such facilities will solve a power problem or bring about an economy in the wholesale power cost to the coöperatives. I recognized that, though this policy seems to be widely accepted, there does seem to be a considerable divergence of opinion as to whether REA is properly administering the program under this policy.

He also warned of the possibility of REA losing control of the program when he said:

If the evidence should indicate that REA is not carefully adhering to the policy, our critics may be successful in convincing Congress that some other agency or method should be tried, other than leaving it to REA's discretion.

CLYDE T. ELLIS, executive manager of the national association, described the situation brought about in Congress with respect to construction by the coöperatives of plants to generate electricity as "our most serious problems," charging it to opposition efforts "to restrict our right to build our own generating plants."

He pointed out that an Agriculture subcommittee had proposed a report that read:

The committee is somewhat concerned by the large increases in the proportion of funds made available that is devoted to loans for generating and transmission facilities. The committee believes that no loan should be made for construction of such facilities unless in areas where private power companies cannot or will not furnish adequate power at reasonable rates and within a reasonable time.

He said that members of coöperatives acted on information from their Washington office to make their views known to their Senators as a result of which the conference report substituted the following paragraph in place of the one objected to by the REA's:

REA is expected to exercise its power generation authority only in line with its announced policy and the law.

Ellis went on:

It must be admitted that the rural electrics did not gain any ground in that battle. We came out of it with the same REA policy regarding loans for generation, a policy which many of our people feel is entirely too conservative and restrictive already, far more restrictive than the language of the REA Act itself.

Discussing the public power programs of the Department of the Interior and of TVA, Ellis said the program had several "close calls" in Congress but after many "savage" attacks came through surprisingly well.

ELLIS then discussed the Hardy Committee of the House, currently investigating the REA program. Of the committee he said:

The committee has finally issued a printed report which I understand is mailed to all systems. It must have been a shock to the power companies that the committee's conclusions were generally favorable. I say "generally favorable," for it criticized half a dozen coöperatives on matters which REA had already investigated and corrected.

The NRECA executive expressed concern over the committee's decision to look further into the REA's generation and transmission program. He added:

Now the committee announces it will study REA's generation and transmission loans. Why, I don't know. We don't know what the



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"BUT LADY, I CAN'T GIVE YOU A DEMONSTRATION EVERY FRIDAY . . . YOU GOTTA MAKE UP YOUR MIND!"

charges are. Two Senate committees have already investigated the generation program this year—and no new loans have been made since.

Ellis then stated that the power companies have been successful recently in efforts to turn labor against the REA as a result of which the sale of power has been questioned by the Utility Workers Union of America (CIO) and the executive council of the International Brotherhood of Electrical Workers (AFL).

He added that power and rural electrification programs have always had the support of representatives from indus-

trial cities and that unless the support of labor can be held in Congress "we will have troubles on our hands even greater than now."

CONCURRENT with the New Orleans meeting A. B. Paterson, president of New Orleans Public Service Inc., and W. O. Turner, president of the Louisiana Power & Light Company, denied assertions attributed to REA Administrator Wickard, NRECA Executive Manager Ellis, and President McWhorter of the association. Paterson said:

> There is no power shortage now in New Orleans, neither was there any during the last war. We were always able to provide electricity, for all companies producing implements of war as promptly as they made application for it—this besides meeting all local needs. We still can.

Paterson went on to point out that "it has been the policy of New Orleans Public Service Inc., ever since 1922, to keep adequate power-generating facilities well in advance of requirements.

"The Market street and the Industrial canal generating plants of New Orleans Public Service Inc. give this area a generating capacity of more than 32 per cent above its peak demands.

"The south-central region, which includes Louisiana, has a generating capacity 24.3 per cent above the present peak demand, and, by 1952, will increase that reserve to an estimated 32.3 per cent. For the nation, the excess generating capacity is 12 per cent. That is shown in the statistical studies of the National Security Resources Board of this year."

He noted that with reference to the statements that Louisiana has high electric rates and pointing to the saving the people would make if TVA rates were in effect: they failed to make allowance for all the interest and the taxes which private utilities pay and which government operations like TVA avoid.

"The TVA report for the year ended June 30, 1949, shows that TVA paid in lieu of taxes $2,050,437 that year and $534,373 in interest. If TVA had paid in state and Federal taxes proportionately as much as New Orleans Public Service Inc. paid in taxes per kilowatt hour of power generated, it would have paid $41,523,292 instead of $2,050,437, as claimed; and if it had paid interest on investment at the long-term rate of 2½ per cent, it would have paid $11,818,675 instead of $534,373. On these two adjustments alone it would have shown for the year's operation, not a net gain of $20,944,415, as reported, but a net loss of $29,812,742.

"In other words, the people of the city of New Orleans and the state of Louisiana are, with the rest of the nation, subsidizing TVA so the people in the TVA area can be given electric service for less than cost.

"It would be a great thing if Louisiana and New Orleans could keep their share of that tax subsidy for enhancing the public services here."

Mr. Turner made the following statement:

> The rates charged the farmers by my company, the Louisiana Power & Light Company, are lower than those charged by the REA coöperatives.
>
> There are 129,295 farms in Louisiana. According to the Edison Electric Institute's statistics as of December 31, 1949, 115,300 of these farms have been electrified. Of that total, 61,478 or 53.3 per cent are being served by privately owned utility companies; 52,477, or 45.5 per cent by the REA, not the 84.9 per cent as claimed by Mr. Wickard; and 1,375 or 1.2 per cent by municipalities.

JOHN BRADY, president of the Louisiana Telephone Association, told the rural electrification coöperative representatives that independent telephone companies and the Bell system have decided to do the job of taking phone service to the rural areas in Louisiana. Brady said:

> While the economic life of the United States is at a higher level than

ever before, the telephone industry is suffering from the law of diminishing returns. The greater the investment in equipment, the larger the number of customers, the smaller is the profit percentage.

Passage of the rural telephone loan bill is a needed shot in the arm for our industry. We are getting a transfusion that could not have happened in any other way.

Of the 34 independent telephone companies in the state, he declared, 28 have already made applications for government loans to improve their plant and extend into rural areas. The loan fund voted by Congress is under the direction of the Rural Electrification Administration, which was originally established to push electrification of farm homes.

—D. T. B.

## New Underground Gas Reserves

NEW underground gas storage reservoirs are being sought in the Midwest to ease winter space-heating supply problems. The Texas Illinois Gas Pipeline Company recently received permission to start drilling tests to see if an underground layer of sandstone in Kankakee county, Illinois, is suitable for storing natural gas. Texas Illinois is an affiliate of Peoples Gas Light & Coke Company of Chicago.

James F. Oates, Jr., chairman of both companies, has recently issued a statement describing the contemplated operations.

Oates said that natural gas transmitted by the new line Texas Illinois is building from the Texas Gulf coast fields to the Chicago region would be stored for use in cold weather when demand "reaches spectacular peaks." He went on:

> Such a storage field could well prove the solution to Chicago's present winter gas supply problems, and could eventually provide space-heating service for the more than 90,000 families who are on the waiting list for gas heat. Underground storage, if it is found feasible in a region near the pipe-line terminals, would be far more economical than the construction of additional long-distance pipelines.

Oates stated that geologists and gas engineers will begin drilling tests immediately, with the first step the drilling of a series of ten to fifty shallow holes along highway rights of way to determine the geological structure of the area. After this, one or two deep holes will be drilled to the sandstone stratum to determine its characteristics. The utility official then explained:

> If the formation, which is 1,600 feet below ground level, meets all the requirements, the Texas Illinois Company will employ the "water bubble" method of storing the gas in the sandstone deposit. Natural gas from the pipeline would be pumped into this deposit under sufficient pressure to displace the salt water, creating a huge reservoir of stored gas.

OATES asserted that if the area measures up to expectations of geologists and the sandstone method or a similar one is adopted it would prove an important step in the program of Peoples Gas and affiliated companies to solve gas supply problems developed since World War II in the Chicago area.

The official then noted the capacity of the new pipeline and the opportunity to increase the effectiveness of its supply when he said:

> The new $130,000,000 Texas Illinois pipeline, which is scheduled to be completed late in 1951, will have an initial capacity of more than 374,000,000 cubic feet of natural gas daily. The effectiveness of its supply capacity for meeting the requirements of year-around customers will be multiplied several times if extensive volumes of



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its output can be stored and held for periods of peak use.

Michigan Consolidated Gas Company and East Ohio Gas Company are using exhausted gas and oil wells for storage of natural gas in the Detroit and Cleveland areas. Underground fields, similar to the one planned by Texas Illinois, are in operation elsewhere in the country.

—D. T. B.

## Water Tunnel

THE U. S. Bureau of Mines has disclosed tentative plans for a 300-mile water tunnel system to drain more than 100 underground lakes in eastern Pennsylvania into the Atlantic ocean. It would make available vast anthracite reserves. Such a tunnel is estimated to cost $1,000,000 or more a mile.

Water from the pools has filled hundreds of abandoned mines and is hampering progress in many other mines throughout the Pennsylvania anthracite region, a key source of fuel for the eastern United States.

Simon H. Ash, chief of the bureau's safety division, has stated that such a tunnel would drain off a stream of fresh, potable water larger than the Susquehanna river. He said this water could be piped to provide a city such as Reading, Pennsylvania, with all the water it might ever need, or to supply heavily industrialized areas such as Baltimore, Philadelphia, or New York city with great quantities of clean water.

The tunnel also would have a great hydroelectric potential after the anthracite fields were depleted. Because of the key nature of the anthracite industry in the economy of the eastern seaboard, no power development would be proposed that would compete with hard coal.

The tunnel could be built from the anthracite area to tidewater as far north as Perth Amboy, New Jersey, or as far south as the Havre De Grace, Maryland, area.

However, the bureau now believes that a route from Glen Lyon, Pennsylvania, and the Scranton, Scranton-Wilkes-Barre areas, under the Hazleton, Pennsylvania, area and into the tidewater section of the Susquehanna river below Conowingo, Maryland, would provide the best drainage from the deepest pools.

The Bureau of Mines already is making a preliminary study of this route.

Mr. Ash has estimated the cost of the project at from $300,000,000 to $500,000,000.

A tunnel drainage project would uncover sufficient anthracite reserve to at least double prospective output to 10 billion tons worth $80 billion, he said.

The proposed tunnel would have a 250-foot drop from the anthracite area to sea level, and in the Hazleton area would be about 1,500 feet underground.

## "Cold Steam" Locomotive

THE "cold-steam" locomotive was a major topic of conversation among railroad fans in Minneapolis recently.

Powered by "dry ice," the model locomotive, built to one-quarter of an inch to a foot scale, was demonstrated before several hundred persons over the right of way of the Twin City Terminal Railway in the model rail exhibition room in the Union depot.

The first of its kind ever constructed, the engine is propelled by the vapors of dry ice.

A pressure of 48 pounds is generated and the miniature locomotive can pull a string of 72 model freight cars at 90 scale miles per hour.

When "fueled" with 17 ounces of dry ice, which is carried in a car behind the tender, the engine will operate continuously for nearly four hours. It was designed and built by Emil Vollender, of Sacramento, California, and its proponents express belief this type of power may become universal on railroads, because of economical factors.



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# The March of Events



## In General

### Falck Leaves NSRB

EDWARD FALCK, consulting engineer of Washington, D. C., recently resigned as director of the Office of Energy and Utilities of the National Securities Resources Board. He is succeeded by Major General Everett S. Hughes, USA (retired).

Falck served the board since 1948 without compensation, presumably on an intermittent basis, but the work rapidly developed into an almost full-time job, leaving too little time for his private business.

It was under Falck's direction that NSRB's utilities section developed and catalogued in minutest detail the electrical power resources and potentialities of the nation. A tireless worker, he brought about effective coöperation between government and industry in the field of electric power as related to production for peace as well as for war.

In his letter of resignation, Falck explained that the scope of the work of the director had reached the point where it requires someone who can arrange to devote his full time and energy to it. This he was not in position to do, Falck said, adding that his services would always be available as a consultant.

NSRB Chairman W. Stuart Symington paid tribute to Falck's abilities and his unselfish service to the government. Symington also accepted Falck's offer of availability as a consultant.

### New Congressional and Other Alignments

THE incoming 82nd Congress, which will have 234 Democrats, 199 Republicans, one Democratic-Liberal, and one Independent in the House, and 49 Democrats and 47 Republicans in the Senate, will have new committee alignments of interest to the utilities.

In the Senate, the Republicans can gain one seat on the Public Works Committee and one on the Interior and Insular Affairs Committee, if the leadership desires. The Republicans also will pick up one, maybe two seats, on the Interstate and Foreign Commerce Committee, as well as on the powerful Appropriations Committee. Also due for considerable alteration is the Labor and Public Welfare Committee, which numbered among its casualties its chairman, Elbert D. Thomas (Democrat, Utah), Claude Pepper (Democrat, Florida), and Forrest C. Donnell (Republican, Missouri). The Republicans can replace Donnell and place an additional Senator on this committee. And, it is noted here that Senator Wayne Morse (Republican, Oregon) may leave the Labor group for the Foreign Relations Committee.

House committees will likewise undergo alterations, with Republican representation increased on many of them. The Education and Labor Committee, in the 81st Congress divided 16 to 9 in favor of the Democrats, will likely see this ratio slide to at least 14-11, and perhaps even 13-12. The new committee will be headed by the relatively conservative Graham A. Barden (Democrat, North Carolina), while those missing from the former line-up will be former Chairman John Lesinski (Democrat, Michigan—deceased); Hugo S. Sims (Democrat, South Carolina);

Andrew Jacobs (Democrat, Indiana); and Thomas H. Burke (Democrat, Ohio).

The House Public Lands Committee, legislative group for the Department of Interior (and Bureau of Reclamation), will see changes of interest, but at this point they cannot be properly evaluated. John R. Murdock (Democrat, Arizona) will move up to the chairmanship by reason of the voluntary retirement of J. Hardin Peterson (Democrat, Florida). Murdock has been a consistent supporter of the Central Arizona project.

Eliminated from Congress was Cecil F. White (Democrat, California), author of a bill to let Reclamation Bureau, rather than the Pacific Gas and Electric Company, develop the Kings river as a part of the California Central Valley project.

Also out of the Public Lands group is Representative Compton I. White (Democrat, Idaho) — generally agreeable to legislative requests of Reclamation. A critic of the bureau, however, Thomas H. Werdel (Republican, California), now on the Labor Committee, may seek a post with Public Lands by virtue of the death of William Lemke (Republican, North Dakota), and because the GOP will be entitled to two additional seats on the committee. John E. Miles (Democrat, New Mexico) will probably be replaced on the committee by his successor John J. Dempsey, also a Democrat. One Republican committeeman who will not return is J. LeFevre (New York), succeeded in the House by another Republican, J. Ernest Wharton.

On the tax-writing House Ways and Means Committee, there were comparatively light casualties. Lame ducks include Walter A. Lynch (Democrat, New York), who failed in his bid to unseat Governor Dewey; John A. Carroll (Democrat, Colorado), who unsuccessfully bid for the Senate seat of Eugene D. Millikin (Republican); and Stephen M. Young (Democrat, Ohio). This committee, now lined up 15-10 in favor of the Democrats, may see a new ratio of 13-11.

Of perhaps even greater interest to the operating utilities was the turnover in gubernatorial contests. This is natural because governors name the members of regulatory commissions in most of the states.

In six commonwealths — Arizona, Colorado, Connecticut, Maryland, Nevada, and New Mexico — Republicans will replace Democrats. In all of these states, Arizona excepted, regulatory commissioners are appointees of the governor.

Political equilibrium of the Michigan commission, which was unbalanced by the recent death of a Republican member, may depend upon the incumbent governor, G. Mennen Williams (Democrat), who still faces a recount.

## New LP Gas Advertising Gets under Way

THE second round of advertising in the national campaign to promote sales of liquefied petroleum (LP) gas and the appliances it can serve is now moving ahead under full steam with advertisements scheduled to appear in 45 national, sectional, and state publications during the remainder of the year.

According to information from the National Committee for LP-Gas Promotion, the plan has the official support of 619 contributing members. These include 525 LP-gas marketers, 34 producers, 57 appliance and equipment manufacturers, and 3 miscellaneous industry organizations.

The program includes display advertising, specialized publicity, and employee training, according to the national committee.

## Appliance Manufacturers' Association Names Officers

THE National Electrical Manufacturers Association, meeting recently in annual convention at Atlantic City, New Jersey, elected officers for 1951 and heard 1950 described as "a great year" for the membership with employment, sales, and income showing a sharp increase.

Elected president of the association

was C. W. Higbee, manager of the electrical wire and cable department of the United States Rubber Company, New York, succeeding Charles T. Lawson, vice president of the Nash-Kelvinator Corporation in charge of Kelvinator sales. Other officers elected were:

R. I. Murphy, Philadelphia, Alan F. Sheldon, Phillipsdale, Rhode Island, J. H. Jewell, Pittsburgh, A. A. Berard, Mount Vernon, New York, and J. F. Lincoln, Cleveland, vice presidents; L. G. Hall, St. Mary's, Pennsylvania, treasurer; James M. Brennan, Delwood, Illinois, J. W. Corey, and W. S. Kendrick of Cleveland, directors.

C. A. Bemis, Pottstown, Pennsylvania, vice president of the Sepco Corporation, was named chairman of the electric water-heating section, and Ben G. Sanderson, general sales manager of the deep-freeze division of Motor Products Corporation, North Chicago, Illinois, chairman of the farm and home freezer section.

Frank Thornton, Jr., engineering manager of association activities of the Westinghouse Electric Corporation, Pittsburgh, was presented with the James H. McGraw award manufacturers medal for 1950. He received the honor for his contributions to standardization, code developments, and safety regulations.

In a closing address to the gathering, retiring President Lawson said that population trends, extension of power lines, and other factors indicated a vast and long-continued expansion of the electrical appliance industry which can remember 1950 as "a great year."

Noting that as population increases, the number of families is growing at an even faster rate, Mr. Lawson said this means that the market for electrical appliances will be considerably larger than would be indicated by population increase figures alone.

Mr. Lawson added that the electrical industry's potential by 1960 could mean national public utility generating capacity nearly double today's figure of approximately 69,000,000 kilowatts. He also predicted average home consumption of electricity would double within the coming decade.

# Alabama

## No Bidders for Transit System

EFFORTS of the Birmingham Electric Company to comply with divestment orders of the Securities and Exchange Commission have come a cropper and pose a question that may puzzle the "experts."

In brief, what can a utility do, or what does it do, when its officers cannot dispose of property as ordered under the Public Utility Holding Company Act?

Despite newspaper advertising and widespread distribution of prospectuses about the transit system that BEC was ordered by the SEC to dispose of by August 31, 1951, no one seems interested in buying the property. Recent bid requests were without results.

BEC President C. S. Thorne, expressing disappointment that no one has tendered a formal bid to buy the transit system, said that he would continue to make every effort to sell, adding that in the meantime the company would go ahead as rapidly as possible with plans for modernization.

# California

## API Names Officers

THE American Petroleum Institute, meeting in its thirtieth annual convention at Los Angeles recently, re-elected W. Alton Jones, president of Cities Service Company, as chairman,



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and reëlected Frank M. Porter as president. Other officers elected were:

Harry J. Kennedy, vice president, Continental Oil Company, Houston, Texas, vice president for marketing; J. C. Donnell II, president, Ohio Oil Company, Findlay, Ohio, vice president for production; W. L. Stewart, Jr., vice president, Union Oil Company of California, Los Angeles, vice president for refining; T. E. Swigart, president, Shell Pipe Line Corporation, Houston, vice president for transportation (reëlected); and B. Brewster Jennings, president, Socony-Vacuum Oil Company, Inc., New York city, treasurer (reëlected).

Secretary of the Interior Oscar L. Chapman told the gathering that he was confident the petroleum industry would meet the mushrooming defense and civilian demands for gas and oil with the same "spectacular" success that marked the crucial oil battle of World War II. He said that as Petroleum Administrator for Defense he had called upon the industry to take the necessary steps to increase the nation's aviation gasoline supply by 25,000 barrels a day before the end of the year, and expressed confidence that the request would be met.

# Iowa

## River Pipe-line Hearing Set

IOWA-ILLINOIS GAS & ELECTRIC COMPANY, Davenport, was scheduled to appear before the Federal Power Commission on December 5th for a public hearing on the company's application to construct a natural gas pipeline across the Mississippi river to connect facilities in Davenport with those in Illinois.

# Nebraska

## New Gas and Oil Strikes In Sidney Area

Two recent new gas and oil strikes—22 miles apart—have stepped up enthusiasm for further explorations in Cheyenne county.

Ohio Oil Company has brought in a new gas well five miles south and west of Sidney with indications that it will have a daily production of about 10,000,000 cubic feet.

Almost coincidental with the Ohio discovery, the Olds Drilling Company, operating in the extreme north end of the county, recovered 120 feet of oil in the Third Dakota sandstone series.

Ohio also brought in an oil producer on the Huntsman High structure, four miles north and west of Sidney.

# Texas

## Underwater Gas-oil Boundary Sought

PRICE DANIEL, attorney general of the Lone Star state, recently asked the U. S. Supreme Court to fix definite boundaries between state and Federal submerged petroleum and gas deposits before the government bans offshore drilling.

Price also said that he will ask the high bench to reconsider its decision of last June, sustaining Federal claims to oil-rich lands under the Gulf of Mexico. The Supreme Court announced on October 16th that it would not reconsider that ruling.

In the meantime, Price has said that "new faces" in Congress may be more inclined to smile than frown on Texas' claims to its tidelands.

"At least all strong advocates for state ownership were returned to Congress and several of the strongest foes were unseated [November 7th]," Price declared.



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# Progress of Regulation

## Proposed Natural Gas Service to New England Disapproved As Inadequate Despite Public Need

THE Federal Power Commission denied competing applications for authority to construct and operate natural gas pipe-line facilities to serve designated distributing companies in New England. This action was taken despite evidence of public need and demand for natural gas service in that area. The commission concluded that the projects proposed did not meet the test of public convenience and necessity.

The issuance of a certificate to either company would not provide adequate and satisfactory natural gas service to the area at a reasonable cost. Neither company sought authority to serve the entire area.

The commission said that there would be needless duplication and overlapping of facilities. Issuance of a certificate to either would render the other company's project infeasible. A part of New England would, as a result, be without needed natural gas service.

The commission observed that these companies, in proposing to make natural gas available to New England, had placed their own interests above the best interests of the public. The commission was concerned with a public need and demand for natural gas service in New England generally, rather than a portion of that area. The commission did not believe that a company engaged in a business affected with a public interest should be allowed to choose whom it wished to serve without proper regard for the public good. It believed that it should not authorize any company to serve when it is clear that company plans do not provide the full service to which the people of New England are entitled.

Commissioner Buchanan, dissented because the commission, in reaching its decision, failed to indicate to the companies how this problem could be solved. He thought that positive administrative action was necessary. He proposed to issue a certificate to one of the two companies immediately. Commissioner Buchanan conceded that a portion of New England might not benefit immediately from his recommended action, but he said that experience is convincing that no service area has ever been developed completely until after the initial introduction of natural gas into that area. He believed that if authority were granted to serve part of New England, other applications would immediately be made to serve the remaining segment of the area.

Commissioner Buchanan felt that the position which he took should be recognized only as a certification of the one medium that could get an adequate supply of natural gas to a large portion of New England at an earlier date than any other company and with the possibility, in fact a probability, that the entire area would receive equal benefits, if desired, within the same year.

The trouble in New England, he said, has been the struggle for management and control of the New England servicing companies. He believed that public convenience and necessity now require the termination of that struggle by com-

mission action based on the record. *(Docket No. G-1248 et al. Opinion No. Re Tennessee Gas Transmission Co. 201).*

## Contract between Regulated Power Companies Found to Violate Antitrust Laws

A CONTRACT giving a power company the right to control prices and restrict operations of a competitor, according to a Federal court decision, is not exempt from the condemnation of the antitrust laws by reason of the fact that the companies are regulated by commissions. Moreover, the validity of such an agreement does not depend on the reasonableness of rates or the question of public benefit.

Taking this view, the United States Court of Appeals reversed a district court order upholding a contract between Pennsylvania Water & Power Company (a Pennsylvania corporation) and Consolidated Gas Electric Light & Power Company (a Maryland corporation). Agreements between these companies had, since 1931, provided for coöperative use of power resources.

They gave Consolidated a claim on electricity generated at the Safe Harbor plant, which had been constructed and financed through coöperative action. In return, they obligated Consolidated to pay Penn Water's operating expenses, depreciation expense, and a specified return. The basic agreement had not been submitted to or approved by either the Pennsylvania or the Maryland commission.

Close coöperation continued, under interlocking directorates, until about 1946. After retirement of certain directors, disagreement arose.

The effect of the agreement was to confer upon Consolidated the power to control prices to be charged by Penn Water, the territory it could occupy, the extent to which it could expand its plant, and the amount of back-feed energy it must buy from Consolidated.

This, said the court, violated the Sherman Antitrust Act. The effect was to divide between two large companies a trade territory in which they would otherwise be competitors. Consolidated had in fact restricted Penn Water's contracts and expansion plans. The contract was therefore illegally in restraint of interstate commerce.

The court also indicated that the provision of the contract relating to the purchase of back-feed power violated the Clayton Act because it prohibited Penn Water from buying supplemental power from Consolidated's competitors.

A challenge to the jurisdiction of the district court, based on the premise that the Federal Power Commission had exclusive primary jurisdiction, was overruled. The court ruled that no prior administrative determination was necessary. The fact that a prohibition against monopolies was included in the Federal Power Act, as one matter to be considered in awarding licenses for power projects, did not take away the power of the courts to enforce the antitrust acts.

Finally, the court upheld a contention by the Pennsylvania commission that the agreement not only violated the antitrust laws, but also disabled Penn Water from performing its proper functions as a public utility under state law. It prevented that company from taking the initiative in proposing reasonable rates and rendering adequate service. *Pennsylvania Water & Power Co. et al. v. Consolidated Gas Electric Light & Power Co. et al.*

## Original Cost Rate Base Accepted

IN several states, statutes or constitutions require consideration by the state commissions of reproduction cost in determining a rate base. In others,

the commission may give consideration to reproduction cost evidence when offered. The Indiana commission, after making those statements, said that it falls in the latter group, as the Indiana statute provides that the commission may take into account reproduction cost at current prices less depreciation.

The commission was of the opinion, however, that reproduction cost of utility property at current prices is so largely the product of opinion and so speculative and conjectural as to have little probative value in the determination of the fair value of utility property. Other evidence of value, such as original cost, was considered more satisfactory.

The Supreme Court of the United States, the commission observed, has never held that reproduction cost must be given exclusive weight in determining a rate base. The Court had held prior to 1944 that reproduction cost was one of the elements to be considered. Recent decisions of that Court, continued the commission, have freed both the Federal and state commissions from any obligation imposed upon such bodies under the due process requirement of the Federal Constitution to give consideration to reproduction cost. *Re Kokomo Water Works Co. (No. 21718).*

## State Commission Power to Fix Price of Gas At Wellhead Upheld by Court

THE Kansas Supreme Court sustained the decision of the Kansas commission, in *Re* Hugoton Gas Field (1949) 77 PUR NS 150, that the commission has power to fix the price to be paid for natural gas at the wellhead. Such regulation was said to be necessary under conservation laws to prevent inequitable or unfair taking of gas and to prevent unreasonable discrimination in favor of or against any producer of gas from a common source of supply.

Companies appealing from a district court judgment which upheld the commission decision contended that since they are engaged in the business of transporting natural gas in interstate commerce, they are governed wholly by the Federal Natural Gas Act. The court decided that the jurisdiction of the Federal Power Commission does not extend to intrastate transportation or sale of natural gas, to the local distribution of natural gas, to the facilities used for such distribution, or to the production or gathering of natural gas. In Kansas, said the court, the production and distribution of natural gas for light, fuel, and power are a business of a public nature, the control of which belongs to the state.

On the question whether the state had delegated such powers to the commission, the court declared that the dominant purpose of the applicable statute is to prohibit waste of natural gas in Kansas, not only in the manner and under the conditions of its production, but for such purposes as would constitute waste. This includes "economic waste."

The statute also deals with the rights of holders of property under which there is a common source of supply of natural gas.

The court continued:

> It is true the statute did not specifically authorize the commission to fix a wellhead minimum price to be paid for gas produced. It did not forbid the commission to do so if and when the evidence disclosed the fixing of such price would tend to prevent waste and the inequitable and unfair taking of gas from a common source of supply. Hence, the legal question presented by appellants, that the statute did not authorize the commission to make the interim order complained of, is not well taken.

A contention that the commission order constituted a special law, being limited solely to the Kansas Hugoton gas field, and was therefore unconstitutional was met with the statement that the court took judicial notice of the fact that

the Hugoton gas field in Kansas differs in many respects from any other gas field in the state. It was also said that the prohibition against special laws was intended to apply to laws enacted by the state legislature, but the court did not consider it necessary to decide the question whether this prohibition applies to a law purporting to be made by public authority.

Contentions that the regulative order violated existing contracts for the purchase of gas were also rejected. The companies, said the court, obtained gas under a standard form purchase contract made subject to modification by a duly constituted authority having jurisdiction. *Kansas-Nebraska Nat. Gas Co., Inc. et al. v. State Corporation Commission et al. 222 P2d 704.*

## Burden of Illegality on Opponents of Reduced Fares

THE Colorado commission, in dismissing a petition for the suspension of reduced railroad rates and withdrawing its own motion of suspension as to other schedules, held that a reduction in rates or fares carries a presumption of legality. The rule is not changed even though rates or fares are suspended by the commission pursuant to protest or on its own motion.

The burden of proof remains upon those who oppose the reduction to show that it is unreasonable or discriminatory and a suspension made on the commission's own motion is merely to maintain the status quo until the protestants or commission staff have a chance to show how the public or protesting carriers would be harmed. *Re Atchison T. & S. F. R. Co. et al. (Investigation and Suspension Docket No. 314, Decision No. 35264).*

## Sewer Company Denied Order Requiring Municipal Plant To Produce Records

THE New Jersey Board of Public Utility Commissioners denied a sewer company's application for a subpoena requiring a municipality to produce evidence as to its sewer operations, in support of the application of the company for a rate increase.

It was not shown that the records and testimony would be proper evidence. The value of comparisons of utility operations was said to be questionable.

These records, moreover, were open to the public and available to the company and would be supplemented, according to a stipulation entered on the record, by direct testimony when and if it appeared relevant and necessary to the proceeding. Under such circumstances the board did not believe that the city should be required to produce the records. *Re Long Branch Sewer Co. (Docket No. 5176).*

## Financing Needs Necessitate High Debt Ratio

A GAS company's application for authority to issue additional common stock, first mortgage bonds, and debentures to secure funds to retire outstanding bonds, preferred stock, and bank notes and to pay for additions to plant was approved by the Wisconsin commission. The expansion was necessitated by an increased demand for space-heating service following the introduction of natural gas into the area.

A ratio of proposed bonds and debentures to total utility assets of 66 per cent was described as so high as to require a reduction in the amount of the bond issue in the absence of special circumstances.

In approving the plan the commission



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considered the circumstances which warranted a departure from usual bond and total debt ratio standards. The normal amortization and reinvestment of natural gas conversion expense would, according to the commission, bring about an improvement in the investment status of the bonds and other securities of the company.

However, the sinking-fund provisions of the bonds and debentures would also gradually improve the debt ratio.

The commission, in considering the utility's pledging of stock holdings in a coke company as security for the proposed bonds, commented:

> . . . a nonutility investment whose earnings are not subject to our regulation cannot be given the same weight in considering security ratios and the reasonable protection to purchasers contemplated by the statutes, as an equal amount of utility property. In fact, there are good reasons why nonutility investment should not be considered in determining reasonable ratios of utility stocks and bonds, just as such investment is not considered in fixing a rate base and prescribing reasonable rates for service.

Finally, the commission ruled that although the proposed financing program would result in an excessively high debt ratio, sufficient improvement in these ratios could be expected in the future to justify approval of the program. The commission was careful to point out, however, that this does not mean, nor should it in any way be inferred, that future financing may be done with 60 per cent in bonds. *Re Milwaukee Gas Light Co. (2-SB-428).*

## Collateral Attack on Commission Order Dismissed

A COMPLAINT seeking an order requiring motor carriers to discontinue alleged illegal interchange service was dismissed by the Pennsylvania commission on the ground that the question involved had been decided in a prior order.

It was held that collateral attacks on prior orders would not be permitted and that to sustain this complaint would place the commission in the position of having to pass upon the question of interchange at any time one of the protestants decided to make a new shipment the basis for a complaint.

The commission further ruled that a complaint cannot be made a substitute for an appeal or proper procedural action challenging the propriety of a final order, notwithstanding that the cause of action involves the legality of a motor carrier's interchange determined by order in a prior complaint, which order is now the subject of an appeal. *Lancaster Transp. Co. et al. v. Highway Express Lines, Inc. et al. (Complaint Docket No. 15005).*

## Telephone Rate Increases Lag behind Cost of Living Increases

THE Michigan commission denied a petition for rehearing of its order granting a telephone rate increase. It held that it would not reconsider the matter because the petition raised neither new questions nor different circumstances since the record in the original proceedings closed. In rejecting the argument that it had not properly weighed the evidence before it, the commission pointed out that the evidence was conflicting and that the conclusions drawn did not mean that it had accepted or rejected the evidence of either party. It meant that it had considered all of the evidence and had drawn its own conclusions. The commission held that no legal error could be claimed simply because it did not accept the evidence of one party and reject that of the other.

The commission pointed out that the new rate schedules would produce rea-

sonably close to the amount authorized. It found that telephone rates, including this increase, have increased on the average only 21 per cent since prewar and that telephone service is priced so as to be easily within the reach of all householders or businessmen who desire it. The commission also observed that, since salaries and wages have increased, individuals are better able to pay for telephone service. It concluded that the rates ordered were just and reasonable, particularly when contrasted with the increase in the cost of living of about 70 per cent during the same years.

The commission was mindful of its duty to assure adequate revenues to the utilities it regulates. It said:

> Such revenues are not alone for an impersonal corporation, but are in fact the sustenance of all the people who are reliant upon the corporation for their livelihood. We do not wish to be misunderstood as overemphasizing this aspect of rate regulation. However, Michigan Bell Telephone Company has more than 20,000 employees who, together with their families, are dependent upon the company for providing good wages and working conditions. This contributes to the welfare of every community in which those employees live and work. Moreover, the company has been carrying out an extensive construction and betterment program which in itself has provided employment to additional thousands of persons throughout the state. These things, of course, do not bear directly upon the reasonableness of the company's rates, but it is important that they be not overlooked entirely.

The commission conceded that it had made no appraisal of reproduction cost. It noted that this has never been considered indispensable to a determination of fair value. If such evidence is submitted, it must be considered, according to the commission. However, it said, it has no difficulty in satisfying itself as to fair value without that evidence. *Re Michigan Bell Teleph. Co. (T-252-50.21).*

## Commission Cannot Date Back Order Approving Mortgage of Operating Permit

THE Colorado commission authorized the mortgaging of a permit for motor carrier service but refused to date the order back about six months to the time when the matter of the approval of the mortgage was first proposed. The commission ruled that it could not confirm by an order *nunc pro tunc* (entry now as of a former date) an action of the commission which was not taken at the earlier date.

The problem was presented because a judgment had been taken against the mortgagor. He had been examined as to assets and had testified as to his indebtedness and the execution of the chattel mortgage. A receiver had been appointed to hold title and control of the permit and to sell it and apply the proceeds towards satisfaction of the judgment. The debtor had been ordered by the court not to transfer, sell, or encumber the permit until further order of the court.

The commission was not a party to the district court proceeding, and it said that it was in no way bound by it. There was nothing pending before the commission relative to the permit except the chattel mortgage, the original letter of transmittal, and the question as to whether the mortgage should be authorized by the commission, and if so, whether the authorization should be made effective as of the present date or as of the earlier date. The commission was not interested in the question whether or not the mortgage was a purchase money mortgage. The note secured by the mortgage was for the exact amount due from the judgment debtor to another man from whom he had pur-

chased the permit, with commission approval.

The commission referred to the rule that it exercises functions similar to those of a court, with continuing power over records to make them speak the truth. The commission may direct that an order, inadvertently omitted from the record, may be entered *nunc pro tunc* on proof of its rendition. But, said the commission:

> The statute does not grant to any employee of the commission the power to authorize a chattel mortgage. This power is reserved to the commission itself. There is no time limit in which action may be taken after the filing of a mortgage. An order *nunc pro tunc* presupposes an order theretofore rendered but not entered to record. No such order has been rendered relative to the mortgage in question, due to the fact that the mortgage was misplaced and not called to the attention of the commission until the petition for the *nunc pro tunc* order was filed.

*Re Barker (Application No. 10663-PP, Decision No. 35488).*

## Transfer Agreement Not Enforceable by Commission

THE Louisiana commission dismissed an application for the transfer of a motor carrier's certificate on motion of the transferor, holding that although it could revoke or suspend a certificate for cause, it is without power to prevent the withdrawal of a party to the application, as the public service commission cannot force the holder to sell agianst his will.

The commission ruled that if a valid and binding contract exists between the parties, such contract is enforceable only in a court of competent jurisdiction, and not before the commission. *Re Harris (Magnolia Express & Garig Transfer, Inc.) (No. 5459, Order No. 5435).*

## Other Important Rulings

THE New York commission authorized the issuance of additional shares of common capital stock to reimburse the corporation's treasury for capital expenditures, to retire bank loans which had been negotiated to obtain construction funds, and to complete the construction program; and the commission authorized the company to sell such stock at a price not less than 90 per cent of the closing market bid price on the first or second business day prior to the offer of such shares to present stockholders. *Re Rochester Teleph. Corp. Case 14955.*

In awarding a foreign air carrier permit between Costa Rica and the United States, the Civil Aeronautics Board gave consideration to the strong economic and trade relationships between the two countries and the need for faster and more direct service, so that trade could be expanded and a new market provided for Costa Rica's perishable commodities. *Re Lineas Aereas Costarricenses, S.A. (Docket No. 4198).*

The Maine commission held that it does not have jurisdiction over the issuance of securities by a foreign public utility corporation. *Re Citizens Utilities Co. (U. No. 2000).*

The Pennsylvania commission ruled that public convenience and necessity need not be shown by a motor carrier applying for a certificate where such carrier's certificate has been revoked for failure to comply with a commission condition and that defect has been currently remedied, as the need for service was determined in the original proceeding; failure to file an insurance certificate through mistake was a technical violation which would not render the applicant

unfit. *Re Yokes (New Kensington Motor Express) (Applicant Docket No. 35466).*

The Virginia Supreme Court of Appeals reversed an order of the commission dismissing a railroad's petition to close an open agency station where the cost of such service was out of proportion to the revenue derived from that portion of the public benefited and where substituted service would afford the same essential transportation service, but at less convenience to passengers and shippers. *Atlantic Coast Line R. Co. v. Commonwealth ex rel. State Corporation Commission, 61 SE2d 5.*

The supreme court of appeals of Virginia, on affirming a commission order authorizing discontinuance of certain passenger trains, held that commissions and courts cannot shut their eyes to the fact that railroad passenger travel largely has been transferred to the highways, when considering public convenience and necessity and adequate service facilties. *Fleming et al. v. Commonwealth ex rel. Clinchfield R. Co. 61 SE2d 1.*

The Ohio Supreme Court dismissed an appeal from a commission order authorizing a telephone rate increase where no qualified party had perfected the appeal. Objections made at the hearing before the commission by parties who did not apply for a rehearing or join in the appeal would not be available to parties who did not join in the objection but were prosecuting an appeal. *Portsmouth v. Public Utilities Commission, 93 NE2d 563.*

The Wisconsin commission held that a return of 7.6 per cent for a telephone company was excessive, and proposed rates were revised to allow a return of approximately 6.5 per cent. *Re Elroy Teleph. Co. 2-U-3384.*

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***Public Utilities Reports (New Series)*** **are published in five bound volumes annually, with an Annual Digest. These Reports contain the cases preprinted in the issues of PUBLIC UTILITIES FORTNIGHTLY, as well as additional cases and digests of cases. The volumes are $7.50 each; the Annual Digest $6.00. *Public Utilities Reports* also will subsequently contain in full or abstract form cases referred to in the foregoing pages of "Progress of Regulation."**

# Re Indiana Bell Telephone Company

No. 21067
September 5, 1950

APPLICATION *of telephone company for authority to increase rates; granted.*

*Expenses, § 87 — Payments to parent company under license contract — Reasonableness.*

1. Fees paid by an operating telephone company to its nation-wide parent under a license contract providing for the payment of one per cent of gross revenues were considered fair and reasonable after consideration was given to the cost of the services rendered by the parent, p. 134.

*Expenses, § 85 — Equipment purchases from affiliated company — Reasonableness.*

2. Payments by an operating telephone company to an affiliated supplier of telephone equipment were allowed as legitimate operating expenses where no evidence was offered that the materials could be obtained at lower prices from nonaffiliated sources or that the supplier's earnings over a period of years had been excessive, p. 134.

*Valuation, § 104 — Accrued depreciation — Measured by reserves.*

3. The Commission, in determining the amount of accrued depreciation to be allowed in a telephone rate proceeding, will use the actual reserve accrued by the various depreciation rates which have been in effect, rather than a theoretical study as to what the accrued depreciation should be, p. 136.

*Valuation, § 193 — Property used and useful.*

4. The Commission, in determining the value of utility property, must consider all the property of the utility actually used and useful for the convenience of the public at its fair value and establish reasonable and just rates for the service rendered, p. 137.

*Valuation, § 27 — Determination of fair value — Consideration of all bases.*

5. The Commission, in determining the fair value of utility property, must give consideration to all bases of valuation which may be presented and to the reasonable cost of bringing the property to its present state of efficiency, p. 137.

*Valuation, § 40 — Reproduction cost less depreciation — Evidence of fair value.*

6. The Commission, in determining the fair value of utility property, may give consideration to reproduction costs at current prices, less depreciation, p. 137.

*Valuation, § 268 — Land value — Assessed valuation.*

7. The Commission, in determining the value of utility property, cannot consider land values in excess of their assessed valuation for tax purposes, p. 137.



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unfit. *Re Yokes (New Kensington Motor Express) (Applicant Docket No. 35466).*

The Virginia Supreme Court of Appeals reversed an order of the commission dismissing a railroad's petition to close an open agency station where the cost of such service was out of proportion to the revenue derived from that portion of the public benefited and where substituted service would afford the same essential transportation service, but at less convenience to passengers and shippers. *Atlantic Coast Line R. Co. v. Commonwealth ex rel. State Corporation Commission, 61 SE2d 5.*

The supreme court of appeals of Virginia, on affirming a commission order authorizing discontinuance of certain passenger trains, held that commissions and courts cannot shut their eyes to the fact that railroad passenger travel largely has been transferred to the highways, when considering public convenience and necessity and adequate service facilties. *Fleming et al. v. Commonwealth ex rel. Clinchfield R. Co. 61 SE2d 1.*

The Ohio Supreme Court dismissed an appeal from a commission order authorizing a telephone rate increase where no qualified party had perfected the appeal. Objections made at the hearing before the commission by parties who did not apply for a rehearing or join in the appeal would not be available to parties who did not join in the objection but were prosecuting an appeal. *Portsmouth v. Public Utilities Commission, 93 NE2d 563.*

The Wisconsin commission held that a return of 7.6 per cent for a telephone company was excessive, and proposed rates were revised to allow a return of approximately 6.5 per cent. *Re Elroy Teleph. Co. 2-U-3384.*

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# Re Indiana Bell Telephone Company

No. 21067
September 5, 1950

APPLICATION *of telephone company for authority to increase rates; granted.*

*Expenses, § 87 — Payments to parent company under license contract — Reasonableness.*

1. Fees paid by an operating telephone company to its nation-wide parent under a license contract providing for the payment of one per cent of gross revenues were considered fair and reasonable after consideration was given to the cost of the services rendered by the parent, p. 134.

*Expenses, § 85 — Equipment purchases from affiliated company — Reasonableness.*

2. Payments by an operating telephone company to an affiliated supplier of telephone equipment were allowed as legitimate operating expenses where no evidence was offered that the materials could be obtained at lower prices from nonaffiliated sources or that the supplier's earnings over a period of years had been excessive, p. 134.

*Valuation, § 104 — Accrued depreciation — Measured by reserves.*

3. The Commission, in determining the amount of accrued depreciation to be allowed in a telephone rate proceeding, will use the actual reserve accrued by the various depreciation rates which have been in effect, rather than a theoretical study as to what the accrued depreciation should be, p. 136.

*Valuation, § 193 — Property used and useful.*

4. The Commission, in determining the value of utility property, must consider all the property of the utility actually used and useful for the convenience of the public at its fair value and establish reasonable and just rates for the service rendered, p. 137.

*Valuation, § 27 — Determination of fair value — Consideration of all bases.*

5. The Commission, in determining the fair value of utility property, must give consideration to all bases of valuation which may be presented and to the reasonable cost of bringing the property to its present state of efficiency, p. 137.

*Valuation, § 40 — Reproduction cost less depreciation — Evidence of fair value.*

6. The Commission, in determining the fair value of utility property, may give consideration to reproduction costs at current prices, less depreciation, p. 137.

*Valuation, § 268 — Land value — Assessed valuation.*

7. The Commission, in determining the value of utility property, cannot consider land values in excess of their assessed valuation for tax purposes, p. 137.

*Valuation, § 336 — Good will — Going concern element.*

8. The Commission, in determining the value of utility property, makes no allowance for good will for presumptive values growing out of the operation of the utility as a going concern, p. 137.

*Valuation, § 21 — Construction cost — Labor cost — Insurance and interest during construction.*

9. The fair value of utility property must be based on tangible property having value by reason of construction cost; labor costs including supervision, engineering, legal, accounting, and transportation costs; and also including insurance and interest charges on capital accounts during construction, p. 137.

*Return, § 111 — Telephones.*

10. A telephone company was authorized to charge rates which would afford it a return of 6 per cent on the fair value of its property, which rate of return was considered reasonable and just, p. 140.

*Valuation, § 21 — Fair value of telephone property — Factors affecting determination.*

11. The Commission, in determining the fair value of telephone property, will take into consideration the license fee contract, the prices paid for telephone equipment purchased from an affiliated supplier, separation of property, revenues and expenses as between interstate and intrastate business, depreciation, plant under construction, property held for future use, materials and supplies, working cash requirement, original cost of property, reproduction cost of property depreciated, capital structure, and the cost of bringing company's property to its present state of efficiency, p. 141.

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*Expenses, § 85 — Payments to affiliated supplier — Telephone company.*

Statement that it is improper for a Commission to attempt to regulate the prices and earnings of an affiliated supplier of telephone equipment through the disallowance of portions of its charges in the operating expense account of companies within Commission jurisdiction, p. 136.

*Depreciation, § 26 — Annual depreciation of telephone company.*

Statement that the Commission should be consistent in the matter of depreciation, and if a company's accrued depreciation reserve is deficient, should permit the company an annual depreciation charge at a higher level than would otherwise be necessary, in order to make up for the deficiency, p. 136.

*Valuation, § 36 — Measures of value — Error in using one base — Original cost.*

Statement that it is just as fallacious for the Commission to confine its determination of the value of utility property to original cost less depreciation, as it is to use the reproduction cost new theory, which at best is highly speculative, since the former would result in a valuation of utility property at the lowest possible level where the latter, in an inflationary period, would result in the establishment of value at the highest possible level, p. 138.

APPEARANCES: Thomas D. Stevenson, Perry O'Neal, Patrick J. Smith, Attorneys, Indianapolis, for the petitioner; Walter F. Jones, Public Counselor, and Lloyd C. Wampler, Assistant Public Counselor, Indianapolis, for the public; Frederick K. Baer, City Attorney, South Bend,

for the city of South Bend; Raymond N. Fox, City Attorney, Michigan City, for the city of Michigan City; Edward H. Knight, Corporation Counsel, Jesse W. Peden and Adolph G. Emhardt, City Attorneys, Indianapolis, for the city of Indianapolis; Robert L. Stevenson, Mayor, Columbus, for the city of Columbus; Albert Meranda, City Attorney, and Samuel Shannon, Mayor, Jeffersonville, for the city of Jeffersonville; Paul J. Tegart, City Attorney, New Albany, for the city of New Albany; Magnus Heubi, Town Attorney, Clarksville, for the town of Clarksville; Marshall E. Hanley, City Attorney, and Lester Hollaway, Mayor, Muncie, for the city of Muncie; Vernon J. Freed, City Attorney, Mishawaka, for the city of Mishawaka; Albert Stump, Attorney, Indianapolis, for the Indiana Hotel Association; Dudley Jewell, Secretary, Michican City, for the Michigan City Chamber of Commerce.

By the COMMISSION: On the 19th day of November, 1948, the Indiana Bell Telephone Company (hereinafter called "petitioner") filed with this Commission its verified petition, docketed as Cause No. 21067, wherein it prayed that the Commission (a) investigate petitioner's intrastate rates, tolls, charges, and schedules on a company-wide basis; (b) that upon such investigation the Commission finds that petitioner's intrastate rates, tolls, charges, and schedules are unjustly low, unreasonable, and insufficient, and (c) that thereupon the Commission determine, and by order fix, increased just, reasonable and sufficient intrastate rates, tolls, charges, and schedules to be imposed, observed, and followed in the future in lieu of those found to be unjust, unreasonable, and insufficient.

Thereafter, on May 23, 1949, petitioner filed a verified motion for temporary establishment of rates, which motion was denied by order of the Commission approved on August 4, 1949.

Thereafter, on March 16, 1950, and May 18, 1950, respectively, petitioner filed its first and second verified supplemental petitions requesting further increases in its rates, tolls, and charges.

Petitioner is requesting authority from this Commission to place in effect increased rates, tolls, charges, and schedules to be imposed, observed, and followed in the future in lieu of its present rates, tolls, charges, and schedules which will enable petitioner to increase its gross receipts in an amount of approximately $5,325,000 annually.

The Commission caused said petition filed on November 19, 1948, to be set for hearing in the rooms of the Commission on February 3, 1949, and gave notice of said hearing by publication in seventy-eight newspapers of general circulation printed, published, and circulated in thirty-nine counties in Indiana wherein reside patrons of petitioner.

The Commission conducted public hearings on said petitions filed with the Commission on November 19, 1948, May 16, 17, and 18, July 29, September 12, 13, 14, 15, 16, 20, 21, and 23, November 7, 8, 9, and 21, December 12, 13, 14, 15, 19, 20, 27, 28, and 30, 1949, and January 5, 6, and 24, February 20, 21, and 27, March 2, 3, 28, 29, 30, and 31, April 3 and May 22, 23, and 27, 1950, concluding

said hearings and closing the record on May 29, 1950.

During said hearings the Commission introduced in evidence, as Commission exhibits, the respective proofs of the publication of the aforesaid published notices of hearing and of the mailing of notice to interested parties.

During said hearing, testimony under oath was given on behalf of petitioner by Mr. Allen H. Warne, secretary-treasurer of petitioner; Mr. Lawrence J. Dunnewold, equipment and building engineer of petitioner; Mr. Harold R. Moore, inventory and cost engineer of petitioner; Mr. John O. Einerman, assistant chief accountant of the American Telephone and Telegraph Company (hereinafter referred to as the American Company); Mr. Harold R. Bickett, chief statistician of the accounting division of Western Electric Company (hereinafter referred to as the Western); Robert W. Thomas, engineer in charge of the Price Survey Group in the department of operations and engineering of the American Company; Mr. Evans Woollen, Jr., chairman of the board of Fletcher Trust Company of Indianapolis, Indiana; Mr. John P. Collett, president and treasurer of Collett Company, Inc. of Indianapolis, Indiana; Mr. Edwin G. Plum, vice president in charge of the commercial department of petitioner; Mr. F. J. McDiarmid, second vice president of Lincoln National Life Insurance Company in charge of security investments; Mr. Thomas T. Stevenson, actuary and statistician of the American Company; Mr. Charles W. Potter, vice president and general manager of petitioner; Mr. Donald M. Overholser, consulting actuary in the office of George B. Buck, New York, New York; Mr. John B. St. John, an independent actuary, Philadelphia, Pennsylvania; and Mr. Charles B. Mason, general supervisor of buildings and supplies of petitioner. Said witnesses for petitioner identified and gave oral testimony in explanation of petitioner's Exhibits Nos. 1 to 47, both inclusive, set out in Appendix "A" attached hereto. [Appendix "A" omitted herein.]

All of the aforesaid exhibits offered by petitioner with the exception of Exhibits 19, B-5, B-7, and B-8, were received in evidence.

During said hearing testimony under oath was given on behalf of the public by Dr. Laurence S. Knappen, an economist; Mr. Cyrus G. Hill, an accountant, Mr. John J. McGrath, an engineer; Mr. Freeman D. Gates, an accountant; Mr. Charles E. Smith, an engineer; Mr. Harold A. Myers, an accountant; Mr. James M. Honacker, an accountant; and Mr. Allen K. Hamilton, an engineer, all being associated with the Cyrus G. Hill firm, and Sven B. Hansell, an independent actuary of St. Davids, Pennsylvania; Mr. Carl Cecil, chief accountant of the Commission's accounting department; Mr. Garland G. Skelton, an independent consultant accountant, Indianapolis, Indiana; and Mr. William F. Lebo, chief engineer of the Commission's engineering department. Said witnesses for the public identified and gave oral testimony in explanation of public's Exhibits Nos. 1 to 78, both inclusive, set out in Appendix "B" attached hereto. [Appendix "B" omitted herein.]

All of the aforesaid exhibits of-



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fered by the public, with the exception of a part of Exhibit 3 and Exhibits 12, 29, and 77, were received in evidence.

The intervenor, Indianapolis Hotel Association, introduced and offered in evidence intervenor, Indianapolis Hotel Association, Exhibit No. 1 which was received in evidence without objection. No oral evidence was given by said intervenor in explanation of said exhibit. None of the other intervenors offered any oral testimony of exhibits in this cause.

The Commission, having heard and considered all of the evidence of record presented in this cause, having considered the briefs filed by the respective parties and the exhibits received in evidence and being duly advised in the premises, finds that the verified petition filed on November 19, 1948, and the first and second verified supplemental petitions filed by petitioner on March 16 and March 18, 1950, respectively, are in due and proper form and contain all necessary allegations; that said petitions were duly filed; that due legal and timely notice of the commencement of the hearings and continued hearings in this cause was given and published as required by law; that petitioner is a public utility within the meaning of the Public Service Commission Act of Indiana as amended and is subject to the jurisdiction of this Commission in the manner and to the extent provided by the laws of the state of Indiana and that this Commission has jurisdiction over petitioner, the subject matter of said verified petitions and the several prayers thereof, and of this cause.

The Commission further finds from the evidence:

*Organization*

1. Petitioner is a corporation duly organized in 1920 and validly existing under the laws of the state of Indiana and has its principal office and place of business in the city of Indianapolis, Marion county, Indiana; that it is a successor in interest to the properties and operations of the Central Union Telephone Company, the Indianapolis Telephone Company, and a number of other small telephone companies; that petitioner has corporate powers, among others, to own, operate, and manage telephone utility properties within the state of Indiana and is engaged, principally, in the business of rendering telephone utility services and furnishing local exchange and interstate and intrastate message service and other services to the public in some 82 cities and towns in some 46 counties in the state of Indiana with 563,046 telephones in service as of February 28, 1950, of which 447,483, or approximately 79 per cent, are dial; that in rendering said telephone utility service, petitioner operates under indeterminate permits issued by the state of Indiana to petitioner or its predecessors; that the physical properties owned, operated, and managed by petitioner and devoted by it to the supplying of telephone utility service consists of the usual properties, materials, supplies, buildings, switchboards, telephone lines, appurtenances and facilities required and generally used in the rendition of telephone utility service.

*Capital Structure (Total Company)*

2. Petitioner's capital structure as of February 28, 1950, consisted of $85,000,000 of common stock and $4,043,669 advanced by American

Company on open account. Petitioner's capital stock is wholly owned by American Company excepting 10 shares individually owned by its directors. Petitioner has no preferred stock and no bonded or other indebtedness excepting that incurred in the usual course of its business.

*Capital Obligations (Total Company)*

3. Petitioner's average capital obligations as of February 28, 1950, amounted to $89,401,790, consisting of $85,000,000 capital stock, $4,043,669 advances from American Company, $950,360 surplus less credits of $592,239.

*License Contract*

[1] 4. Petitioner has a license contract with American Company which provides for the rendition by that company of services to petitioner in substantially all telephone activities, including development and research, operation and engineering, patent protection in the use of devices covered by Bell system patents, accounting, financing, and legal advice and assistance; and for these services petitioner pays American Company one per cent of its gross revenues.

This license contract formerly provided for rental to petitioner of the telephone instruments then owned by American Company and the license fee was 4½ per cent. After the elimination of the rental provisions of the contract the license fee was reduced to 2½ per cent in 1929, then to 1½ per cent and finally to one per cent on October 1, 1948. The reduction to one per cent resulted from a study made by a special committee of the National Association of Railroad and Utilities Commissioners of which this Commission is an active member.

Following the study and report of this special committee, one per cent has been accepted and adopted by practically all of the state Commissions as a reasonable charge for services rendered under the license contracts by American Company to the Bell operating companies.

Petitioner presented substantial evidence as to the services rendered by American Company to petitioner, the value of such services to petitioner, the need for such services, the procedures used by American Company in determining the cost of rendering such services, the method of allocating such costs by American Company, and the benefits derived from services by the Bell operating companies including petitioner. This evidence is uncontradicted, no evidence in opposition thereto having been presented by the public counselor or any of the intervenors.

The fees paid by petitioner to American Company under the license contract are fair and reasonable for the services rendered by American Company; the costs of rendering such services have been accurately calculated; the allocation of such costs has been equitably made by American Company; and the cost thereof to petitioner is a legitimate charge to its operating expenses in its intrastate operations.

*Western Electric*

[2] 5. Western Electric Company (hereinafter referred to as Western) is the manufacturing and supply unit of the Bell system. It handles the manufacturing, purchasing, warehousing, and distribution of telephone



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equipment and supplies on a centralized basis.

Petitioner has a standard supply contract with Western which provides, among other things, that Western sell to petitioner its manufactured articles in large or small quantities at a uniform price which shall be as low as prices to its other customers and that it will act as a supply, purchasing and warehousing agent for it. Under this contract petitioner is not obligated to purchase from or be supplied by Western unless it so desires.

The supply contract is a matter properly within the province of management and the propriety of entering into such a contract cannot be inquired into by this Commission. However, because of the close intercorporate relationship between the contracting parties, this Commission can and should make inquiry as to the reasonableness of the prices being charged by Western to petitioner which should be allowed as charges to the operating expenses of the intrastate business of petitioner.

Petitioner presented evidence to show that prices being charged by Western under the supply contract are reasonable and are as low or lower than prices obtainable from nonaffiliated sources. Petitioner offered Exhibits B-1 to B-8, inclusive, in support of its position with respect to Western prices. Exhibits B-6, B-7 and B-8 were not received in evidence.

The public counselor presented evidence purporting to show that Western's prices to petitioner are unreasonably high; that Western's net income and rate of earnings are excessive and that its accounting and cost allocations are improper. Public's Exhibits 1 to 16, inclusive, were offered in support thereof. Public's Exhibit 12 was not received in evidence.

This Commission has no direct supervisory control over the accounting and allocation procedures of Western. Its only authority to inquire into Western's prices and earnings flows from the close intercorporate relationship existing between Western and petitioner. Western's accounting and cost allocation procedures and other corporate management practices are fundamentally functions of corporate management. If inquiry into these matters is necessary it should be made by the Federal Communications Commission, or some other Federal agency, having far broader jurisdiction and authority than this Commission.

In determining the reasonableness of Western's prices to petitioner, this Commission is primarily interested in Western's earnings and a comparison of Western's prices with prices obtainable from nonaffiliated sources for comparable materials, equipment, supplies, and services. The undisputed evidence in this record shows that the prices being charged petitioner by Western are as low, and in most instances lower, than prices obtainable from nonaffiliated sources.

Western's margin of profit on sales to Bell operating companies, including petitioner, for the years 1916 to 1948, inclusive, amounted to 4.2 per cent per dollar of sales; and its net income available for interest and dividends amounted to 7.4 per cent return on net investment for the total company business and 7.3 per cent on its sales to Bell operating companies.

In the absence of any evidence tend-

ing to show that petitioner can obtain lower prices from nonaffiliated sources, this Commission cannot arbitrarily find that Western's prices are excessive merely because of the intercorporate relationship existing between the two companies, nor can it attempt, by regulation, to indirectly regulate Western's earnings which, over a period of years, do not appear to have been excessive.

Numerous state Commissions have attempted to regulate Western's prices and earnings through the disallowance of Western's earnings or portions of its charges as operating expenses of the operating companies. Almost without exception, on review by courts of competent jurisdiction, the state Commissions have been reversed.

The Commission cannot find from the evidence in this record that any portion of Western's prices and charges to petitioner should be disallowed as legitimate charges to the operating expenses of the intrastate business of petitioner.

*Accrued Depreciation*

[3] 6. Considerable evidence was presented in this proceeding, both by petitioner and by the public counselor as to the proper amount of depreciation to be allowed. The evidence shows that at the time Indianapolis Telephone Company and Central Union Telephone Company were acquired by petitioner, the property of said predecessor companies was recorded on the books of petitioner at the purchase price and no depreciation was set up. (Approved by orders of this Commission.) An analysis of the retirements, which were charged to the depreciation reserve, shows that very heavy retirements occurred consistently in the early years of petitioner's history. This was offset partially by the heavy annual accruals in which the composite rate did not drop below 5 per cent until after 1932.

Depreciation reserve requirement studies made and introduced in evidence in this proceeding indicate that the accrued reserve was in the neighborhood of 25 per cent low. The Commission, therefore, must decide between a theoretical study and the actual existing reserve as accrued by the various rates which have been in effect. The Commission is inclined to favor the use of the actual reserve which has been accrued and will use the average amount as shown by the company records for the last five months prior to and including February 28, 1950. The average for this period is $26,040,293.

*Annual Depreciation*

7. The Commission has before it testimony and exhibits presented by the public and company witnesses, both of which include studies of average service life, average net salvage, and the final depreciation rate for each subaccount of company plant. The public composite rate as of September 30, 1949, was 4.05 per cent. This compares to the company composite rate of 4.60 per cent. The Commission is of the opinion that it should be consistent in the matter of depreciation and if the existing reserve is deficient, which is indicated by service studies presented in this case, then it would appear that the accruals should be continued at a higher level than otherwise would be necessary if the reserve was at the required level. The Commission will, therefore, adopt the rates as



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proposed by the company and make no change in this allowance.

*Comparison of Postwar Years' Operations (Total Company)*

8. A comparison of the postwar years of 1946 to 1949, both inclusive, shows that petitioner's telephone plant increased from $71,030,305 in 1946 to $118,776,864 in 1949, an increase of $47,746,559 or 67.22 per cent; its depreciation and amortization reserves increased from $20,166,161 to $26,-154,098, an increase of $5,987,937 or 29.69 per cent; its telephone plant less reserves increased from $92,622,766, an increase of $41,783,942 or 82.10 per cent; its operating revenues increased from $27,991,727 to $40,-783,942, an increase of $12,792,215 or 45.70 per cent; its taxes other than Federal income taxes increased from $2,037,034 to $3,060,115, an increase of $1,023,081 or 50.22 per cent; and its Federal income taxes increased from $1,304,200 to $1,837,489, an increase of $533,289 or 40.89 per cent.

During this same period, while petitioner's employees only increased from 7,320 in 1946 to 7,654 in 1949, an increase of but 334 employees or 4.56 per cent, its salaries and wages paid to employees increased from $14,-895,014 in 1946 to $20,680,095 in 1949, an increase of $5,784,081 or 38.84 per cent.

| | 1946 | 1947 | 1948 | 1949 |
|---|---|---|---|---|
| Telephone Plant | $71,030,305 | $84,273,808 | $104,727,349 | $118,776,864 |
| Reserves | 20,166,161 | 22,291,817 | 24,491,672 | 26,154,098 |
| Plant less Reserves | 50,864,144 | 61,981,991 | 80,235,677 | 92,622,766 |
| Operating Revenues | 27,991,727 | 32,255,881 | 38,297,116 | 40,783,942 |
| Taxes Other Than Federal | 2,037,034 | 2,375,486 | 2,753,638 | 3,060,115 |
| Federal Income Taxes | 1,304,200 | 1,103,500 | 1,881,108 | 1,837,489 |
| No. of Employees | 7,320 | 8,155 | 8,018 | 7,654 |
| Salaries and Wages | 14,895,014 | 17,823,964 | 19,586,454 | 20,680,095 |

| | | |
|---|---|---|
| Increase in Telephone Plant | $47,746,559 | 67.22% |
| Increase in Reserves | 5,987,937 | 29.69% |
| Increase in Plant less Reserves | 41,758,622 | 82.10% |
| Increase in Operating Revenues | 12,792,215 | 45.70% |
| Increase in Taxes Other Than Federal | 1,023,081 | 50.22% |
| Increase in Federal Income Taxes | 533,289 | 40.89% |
| Increase in Number of Employees | 334 | 4.56% |
| Increase in Salaries and Wages | 5,785,081 | 38.84% |

*Valuation*

[4–8] 9. Under the law of this state, it is the duty of the Commission to value all of the property of the utility actually used and useful for the convenience of the public at its fair value and establish reasonable and just rates for the service rendered by the utility. In determining fair value the Commission must give consideration to all bases of valuation which may be presented and to the reasonable cost of bringing the property to its then state of efficiency. The Commission may give consideration to reproduction costs at current prices, less depreciation. The Commission cannot consider land values in excess of the assessed values for tax purposes or good will for presumptive values growing out of the operation of the utility as a going concern.

[9] Fair value of the utilities property must be based upon tangible property, having value by reason of construction costs, labor costs including supervision, engineering, legal, accounting, and transportation costs,

and also including insurance and interest charges on capital accounts during the construction period.

Evidence has been offered by petitioner and the public with respect to the value of petitioner's property, actually used and useful for the convenience of the public. Petitioner offered evidence as to the reproduction cost of its property at current prices depreciated, as to original cost of its property, as to original cost of its property depreciated, and as to its capital obligations.

The public offered extensive evidence concerning petitioner's capital obligations, capital structure and original cost of petitioner's property, depreciated, as set out in Appendix "C" attached hereto. [Appendix "C" omitted herein.]

The law of this state does not bind this Commission to the use of any single formula in determining utility property valuation; on the contrary, the act certainly contemplates that the Commission will not be bound by any one theory of valuation and will take into consideration all bases of valuation which may be presented and may give consideration to reproduction costs at current prices, less depreciation.

The public contends that the Commission should give no consideration to reproduction costs at current prices, depreciated, in its determination of property values in this proceeding. The Commission agrees with the public that to use the reproduction cost new theory, which at best is highly speculative, would not be a sound rule to use in establishing utility property valuation, particularly in view of the fact that the use of such a theory would result in the establishment of valuation at the highest possible level and the use of such a theory would be contrary to former decisions of this Commission. On the other hand, it would be just as fallacious for this Commission to restrict its consideration in the determination of valuation to the use of the original cost depreciated theory as the one and only measure of utility property valuation, that probably being one of the lowest valuations that could be considered.

The Commission, having considered the original cost of petitioner's property, the original cost depreciated, the reproduction cost at current prices depreciated, petitioner's capital obligations, the reasonable cost of bringing petitioner's property to its present state of efficiency, and the type of service being rendered by petitioner, petitioner's requirement for working capital and materials and supplies, is of the opinion and now finds that the fair value of petitioner's property used and useful for the convenience of the public in the rendition of telephone utility service, in intrastate commerce, is not less than $88,000,000, which amount will be used as a rate base in this case.

*Adjustments to Net Operating Income*

10. (a) *Pension Accruals*

Mr. Hansell, an independent actuary, employed by the Commission to make a study of petitioner's pension accruals, found that petitioner has been overaccruing for pension purposes. Petitioner's pension accrual rate for 1949 was 6.02 per cent on the modified remaining cost basis, whereas the rate developed by Hansell was

5.05 per cent or .97 per cent less. Petitioner's 1950 pension accrual rate is 6.76 per cent as compared to the rate developed by Hansell of 6.07 per cent, a difference of .69 per cent.

The Commission is of the opinion that the rate developed by the Hansell study should be adopted for the purpose of this rate case and finds that petitioner's net operating income should be adjusted accordingly.

In determining the proper adjustment to be made, as shown on Appendix "D," attached hereto [Appendix "D" omitted herein] the Commission has taken the five months' payroll ending February 28, 1950, of $9,267,545, annualized for an annual payroll of $22,242,108, and applied the Hansell rate of 6.07 per cent which results in a reduction in accruals of $153,470, which is the difference in dollar results from the application of the Hansell rate of 6.07 per cent as compared to petitioner's rate of 6.76 per cent. Charges to construction of $18,263, or 11.9 per cent of $153,470, has been deducted, as shown by public Exhibit 70, leaving a balance of $135,207 as expense portion, for total company.

Pension accruals being computed on total payroll, it is necessary that the interstate part be eliminated. In making this elimination the Commission has used 81.1 per cent as the intrastate portion, this percentage being the mid-point of allocations as shown by petitioner's Exhibits 4, 29, and 44 and public's Exhibits 36, 37, and 38 resulting in an intrastate portion of $109,653. From this amount $658 was deducted as intrastate portion of depreciation applicable to that amount charged to construction, leaving an amount of $108,995. From this amount $41,418 was deducted as Federal income tax on $108,995, leaving a net increase in earnings due to the difference between the application of petitioner's rate of 6.76 per cent and the Hansell rate of 6.07 per cent in the amount of $67,577, which is the amount that the Commission will use in adjustment of petitioner's net operating income.

Pension accruals charged to Account 323 have been determined by using the amount of $36,977 for the five months' period ending February 28, 1950, annualized to $88,745. This amount has been separated as between interstate and intrastate by using 80.33 per cent, as developed on public Exhibit 38 as the intrastate portion which results in the amount of $71,289. From this amount the Commission has deducted $27,090, being Federal income tax at 38 per cent of $71,289, leaving the net amount of $44,199 as a proper adjustment of petitioner's net intrastate earnings, as shown on Appendix "D" attached hereto. [Appendix "D" omitted herein.]

(b) *Federal Tax Savings*

This adjustment is purely an arithmetical computation based upon the assumption that instead of petitioner having a capital structure of 100 per cent common stock, it had a capital structure of one-third debt and two-thirds equity, which would result in an annual Federal tax savings to petitioner of $262,798, as shown on public Exhibit 71 under Honaker Method #1. While this Commission is not attempting to dictate to petitioner what type of capital structure it should have, nevertheless, if petitioner did

have a capital structure of one-third debt and two-thirds equity, it would have realized a tax savings of $262,798 annually and this figure will be used by the Commission in adjustment of petitioner's net operating income as shown on Appendix "D" attached hereto. [Appendix "D" omitted herein.]

(c) *Labor Costs*

This adjustment is the result of the recent and last labor increase resulting from a Labor Arbitration Award. Both the petitioner and public are in agreement that the net effect of this labor increase amounts to $148,562, and this figure will be used by the Commission in adjusting petitioner's net intrastate operating income as shown on Appendix "D" attached hereto. [Appendix "D" omitted herein.]

(d) *Skelton Adjustments*

Garland G. Skelton, an independent accounting consultant, employed by the Commission to make a study of petitioner's operations, in his testimony and in the exhibit which he prepared as a result of his study (public Exhibit 70), finds that certain adjustments should be made to petitioner's intrastate net operating income, in the net amount of $64,397, increasing net income by that amount as shown on Appendix "D." This adjustment has been adopted by the Commission as a reasonable and proper adjustment of petitioner's intrastate net operating income.

Mr. Skelton testified in detail concerning these adjustments and they are fully explained in public Exhibit 70, and set out below.

| | |
|---|---|
| 1. Maintenance Expense (Casualty Expense and nonrecurring expenses in the conversion of the Peru and Frankfort exchanges) | ($226,231) |
| 2. Depreciation and amortization (annualized depreciation rates) | 52,204 |
| 3. Amortization of rate case expenses | ( 250,060) |
| 4. Increase in pension benefits under pension agreement | 86,872 |
| 5. Taxes other than Federal income taxes | 214,006 |
| 6. Federal income taxes | 46,819 |
| Net Operating Income (Total Company) | ( 76,390) |
| Net Operating Income (Intrastate Portion) | ( 64,397) |

( ) Denotes increase.

11. After studying and considering the company method of separation of its property, expenses, and revenues as between intrastate and interstate business and Honaker Separation Method No. 1 and Method No. 2, the Commission finds that, while there is no precise mathematical method of separation, it appears that Honaker Method of Separation No. 1 is more reasonable and equitable and for the purpose of this proceeding will be adopted as the method of separation used.

12. The earnings of petitioner are and have been insufficient to provide a reasonable and just return on the fair value of the property devoted by it to intrastate telephone service in Indiana, resulting from the increased costs of operation, due primarily to increased costs of labor, taxes, and materials and supplies, and that unless an adjustment is made in the rates for such service at this time, petitioner's earnings will continue to be insufficient to provide a reasonable and just return and an adjustment therein should be authorized.

[10] 13. A reasonable and just

rate of return to which petitioner is entitled is 6 per cent on the fair value of its property actually used and useful for the convenience of the public in the rendering of intrastate telephone service in Indiana, which fair value the Commission finds to be $88,000,000 which amount will be used as a rate base in this proceeding.

14. Petitioner's intrastate earnings, based on Honaker Separation Method No. 1 with adjustments which are set out in these findings and appendices attached hereto [appendices omitted], for the five months' period ended February 28, 1950, annualized amounted to $3,765,883. Its earnings, using a base of $88,000,000 and a rate of return of 6 per cent, would be $5,280,000. The difference between what its earnings would have been at a 6 per cent return on a base of $88,000,000 and its adjusted earnings of $3,765,883 results in a deficiency of $1,514,117.

In order to increase petitioner's net earnings in the amount of $1,514,117, it will be necessary to increase its intrastate gross earnings of $2,498,131, which has been calculated as follows:

| | | |
|---|---|---|
| Gross Revenue Increase | | 100.00% |
| Less: License Contract Expense | 1.00% | |
| Indiana Gross Income Tax | 1.25 | 2.25 |
| Balance subject to Federal Income Tax | | 97.75% |
| Federal Income Tax | 38.00% | 37.145% |
| Balance after Federal Income Tax | | 60.605% |
| Used as | | 60.61% |

$$\frac{\$1,514,117}{60.61\%} = \$2,498,131$$

| | | |
|---|---|---|
| License Fee Contract | 1.00% | $24,981.00 |
| Indiana State Gross Income Tax | 1.25% | 31,227.00 |
| Federal Income Tax | 38.00% | 927,931.00 |
| Net to Petitioner | | 1,513,992.00 |
| Total | | $2,498,131.00 |

[11] This proceeding presents the basic problems of determining the fair value of petitioner's property, actually used and useful for the convenience of the public, and the establishment of intrastate exchange and toll rates which will be reasonable and just. In determining the fair value of petitioner's property, the Commission has taken into consideration the license fee contract, Western Electric prices, separation of property, revenues and expenses as between interstate and intrastate business, depreciation, plant under construction, property held for future use, materials and supplies, working cash requirement, original cost of property, reproduction cost of property depreciated, capital structure, and the cost of bringing petitioner's property to its present state of efficiency.

Immediately following World War II, petitioner and all other telephone companies were faced with the problem of meeting unprecedented demands for service both for new service and for regrading of existing service. To meet this demand it was necessary that petitioner make substantial additions to its plant at a time when construction costs were at an



XUM

extremely high level. The costs of petitioner's construction program have been and are being paid for out of funds realized from the sale of additional common stock and out of surplus as is demonstrated by the following figures:

(Total Company)

| | 1945 | 1949 | Increase or Decrease |
|---|---|---|---|
| Gross Plant | $64,380,466 | $118,776,864 | 85.5% |
| Net Plant | 46,717,781 | 92,622,766 | 98.0% |
| Capital Stock | 41,000,000 | 85,000,000 | 107.3% |
| Surplus | 1,485,465 | 979,055 | ( 33.5%) |
| Dividends | 2,870,000 | 3,150,000 | .97% |
| Dividend Rate | 7.0% | 4.0% | ( 3.0%) |

( ) Denotes Decrease

These figures clearly indicate that petitioner's construction program, necessitated by the public demand for additional and better service, has not been paid for out of earnings but, on the contrary, has been paid for out of increased capital investment and from surplus.

Petitioner had in operation as of February 28, 1950, 563,046 stations. The increase in annual gross revenue of approximately $2,500,000, authorized by this order, will result in an average annual increase of $4.40 per station or an average monthly increase, per station, of 36 cents:

| | |
|---|---|
| Accounting fee | $60,996.31 |
| Engineering fee | 44,885.40 |
| Publication of legal notices of hearing | 209.95 |
| Total | $106,091.66 |

*WISCONSIN PUBLIC SERVICE COMMISSION*

# Re Wood County Telephone Company

2-U-3273
August 17, 1950

APPLICATION *by telephone utility for authority to increase rates; exchange rate increase authorized.*

*Valuation, § 237 — Property leased to others — Exclusion from rate base.*

1. The value of a telephone building which is leased to others will be excluded from a rate base where revenues from this property and expenses apportioned to rented space have been excluded from income account, p. 144.

*Expenses, § 142 — Directory expense — Exclusion for failure to sell advertising.*

2. A telephone company's expense for issuing a directory was excluded from consideration in determining the reasonableness of rates because of the company's failure to sell advertising space, which the Commission believed would produce revenue equal or in excess of directory cost, p. 145.

*Return, § 111 — Telephones.*

3. Rates which would yield a return of 6.18 per cent on a telephone company's rate base were considered reasonable and lawful, p. 145.

*Rates, § 565 — Telephones — Pay calls.*

4. A telephone company's request for authority to place into effect a rate of 10 cents for local calls furnished through public and semipublic pay stations will be denied where the record does not contain sufficient data to ascertain the cost of the service, p. 146.

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*Rates, § 571 — Telephone — Switching service.*

Statement that the switching rates of a telephone company of about 8,000 stations consisting of $2.60 per month for business and $1.60 per month for residence were out of line with the cost of such service, particularly since the commission on toll messages originated on switched lines was retained by the company, p. 145.

By the COMMISSION: The Wood County Telephone Company, Wisconsin Rapids, Wood county, filed an application with the Commission on February 28, 1950, for authority to increase telephone rates. Notice of investigation and hearing and assessment of costs was issued March 14, 1950.

Hearing: On April 19, 1950, at Wisconsin Rapids before examiner John S. Cavanaugh.

APPEARANCES: D. G. Smart, General Manager, and H. B. Flower, Superintendent, Wisconsin Rapids, for Wood County Telephone Company; Donald B. Reiland, Attorney, Wisconsin Rapids, for Rudolph Telephone Company, in opposition; William H. Evans, rates and research department, of the Commission Staff.

The Wood County Telephone Company operates three exchanges, Wisconsin Rapids with 6,539 stations, Nekoosa with 865 stations, and Port Edwards with 401 stations. The Wisconsin Rapids and Nekoosa switchboards are of the central energy type, and the Port Edwards switchboard is an automatic board. Unlimited interexchange service without charge is rendered between applicant's exchanges, and toll rates are filed for toll service to exchanges of other companies.

The articles of the Wood County Telephone Company provide that stock of the company shall only be sold to such persons as rent telephone service from it and that not more than 3 shares of its stock for each main line telephone may be held by any stockholder. The par value of each share is $100, and it is binding on the company to so regulate its capital stock that it can and will sell its stock at par. Dividends are credited monthly to stockholders at the same time the monthly bill is rendered. The ownership of the company is widely spread amongst 1,251 stockholders no one of whom owns more than 2.2 per cent of the outstanding shares.

The present and proposed net exchange rates for the principal classes of service are shown below: [Schedule omitted].

Applicant also proposes to revise or

file rates for push buttons, buzzers, public telephones, private branch exchanges, colored handsets, radio loops, and private line service. It is also proposed to increase service connections, move and reconnection charges, and to file general rules and regulations. The revisions are estimated to yield approximately $80,853 of additional revenue a year.

Opposition was entered by the Rudolph Telephone Company to the proposed increase in the toll rate from Wisconsin Rapids to Rudolph from the present 5 cents per message to 10 cents per message for station-to-station, and 25 cents per message for person-to-person messages. The proposed rates would be identical to the intrastate rates of the Wisconsin Telephone Company. Applicant estimates that the decrease in number of messages under the proposed rates will offset increased revenues due to the toll rate increase. No other changes in the present toll rate structure is proposed.

Applicant has negotiated a new contract with the union representing its employees, providing for a pension plan. The contract also contains provision for automatic increases in wages depending on length of service. Because of the growth in number of stations, it is necessary to employ two additional operators, one trouble-man, one clerk, and a janitor in the recently enlarged central office. Increases to foreman and general office employees to maintain wage differentials are also proposed. The amount of these increases apportionable to operating expenses on an annual basis are shown below:

| | Annual Amount |
|---|---|
| Additional employees | $14,073 |
| Pension expense | 12,330 |
| Negotiated wage increases | 2,296 |
| Other wage adjustments | 3,708 |
| Compensation insurance | 263 |
| Total | $32,670 |

Depreciation expense will be increased $5,813 a year based on depreciation rates certified to the Commission applied to plant after additions in the process of construction or to be completed in the next eighteen months. Additional taxes will total $25,238. The wage increases, additional depreciation, and taxes amount to $63,721 a year.

Net operating income for 1949 amounted to $17,232, a decrease of $5,428 from the amount reported in 1948. The applicant's estimate of projected net operating income is $34,364 a year.

The Commission in docket CA-2856 authorized the Wood County Telephone Company to construct $104,786 of additions to plant. The major portion of the additions are for aerial and underground cable to relieve present inadequate cable or open-wire facilities. The Commission has also approved under docket 2-SB-399 a request to issue $200,000 of common stock to retire presently outstanding short-term notes and to pay for additions to plant.

[1] Applicant's gross plant in service as of December 31, 1949, amounted to $813,469. The central office building contains space rented to other persons or organizations. The revenue from this source and expenses apportioned to space rented have been excluded from the income account in the utility's annual report. The Com-

mission will, therefore, exclude $18,000 from plant value representing the estimated portion of the building devoted to nonutility service and included in the building account. Net additions to plant under the construction program will amount to $89,454, bringing the gross book value of utility plant to $884,923. The depreciation reserve as of December 31, 1949, amounted to $277,004. Adjusting the reserve for one year's projected depreciation accrual of $26,580 and retirements of $15,332 results in an adjusted balance of $288,252. The net book value of plant after completion of the construction program is $596,671.

[2] Applicant does not sell advertising space in its directory and directory expense in 1949 amounted to $1,870. It is unusual for a telephone utility of the size of this utility located in a commercial center and county seat to issue a directory without selling advertising space. Revenues from advertising can reasonably be expected to equal or exceed directory expense and, therefore, the Commission will exclude such expense from consideration in determining the reasonableness of the proposed rates. This adjustment will offset the computation of income taxes. Likewise, it is noted that interest expense was not considered by applicant in the computation of income taxes.

[3] The Commission estimates net operating income under the proposed rates to be $38,048 representing a 6.18 per cent return on the net book value of plant plus an allowance of $18,675 for materials and supplies. The proposed rates do not result in an unreasonable return.

The Commission has examined the rates proposed by applicant and believes that some adjustments should be made in the rate differentials between certain classes of service. The proposed differential between business one-party and residence one-party service is $1.75. The differential is considered too low, and the business one-party rate will be increased 25 cents a month. Likewise, the proposed differential between rural business and rural residence rate is only 80 cents, and this differential will be increased to one dollar by increasing the rural business rate 10 cents a month and decreasing the rural residence rate 10 cents a month. The proposed switching rates of $2.60 a month for business and $1.60 a month for residence stations are out of line with the cost of such service, particularly if consideration is given to the fact that toll commission on toll messages originated on switched lines is retained by applicant. The proposed switching rates will be reduced to $1.50 a month for business stations and one dollar for residence stations. Rates for extension stations are not increased in the applicant's proposed schedule. The Commission will authorize extension rates of one dollar a month for business and 75 cents a month for residence stations.

The rates proposed by the Commission will increase revenues in some rate categories and decrease revenues in others, but the estimated net result will be to produce revenues on an over-all basis in an amount which will be approximately the same as would result from application of the company's proposed rates.

The Commission does not believe

that applicant has made sufficient showing for need to increase the toll rate to Rudolph. The Rudolph Telephone Company provides the facilities to the Wisconsin Rapid City limits. Testimony of witnesses indicates a close community of interest, and until more facts with respect to costs are developed the present 5-cent toll rate should be retained. The Wood County Telephone Company and the Rudolph Telephone Company have an arrangement for distribution of toll revenues from this traffic. If the cost of handling such traffic has increased proportionately, more for one company than the other, the connecting company contract can be renegotiated.

[4] The applicant has requested authority to place in effect a rate of 10 cents per local call for service furnished through public and semipublic pay stations. The record does not contain sufficient data to ascertain the cost of such service. In the absence of supporting evidence, the Commission is disposed to continue the present rate of 5 cents per local calls.

The income account for 1949 and pro forma income account after adjustment by the Commission, and the calculation of the rate base are shown below: [Table omitted.]

The Commission finds:

1. That the present exchange rates of the Wood County Telephone Company are unreasonable because of inadequacy.

2. That the present toll rates for messages originating at the exchanges of the Wood County Telephone Company are reasonable and lawful.

3. That the net book value of property and plant in service plus allowance for materials and supplies after completion of the construction program is $615,346 and such amount constitutes a reasonable and lawful rate base for the purposes of this proceeding.

4. That exchange rates authorized herein will result in an operating income of approximately $38,048 representing a return of 6.18 per cent on the rate base found above, which rate of return is not an excessive rate of return and which rates are reasonable and lawful.

The Commission concludes:

That an order be issued authorizing the rates as prescribed herein.

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*NORTH CAROLINA UTILITIES COMMISSION*

# Re Anson Telephone & Telegraph Company

Docket No. P-3
September 27, 1950

APPLICATION *by telephone company for increase in exchange rates; modified rate increase authorized.*

## RE ANSON TELEPH. & TELEG. CO.

*Return, § 111 — Telephones.*

1. A telephone company's return of 4.40 per cent on its net investment was not considered adequate, p. 148.

*Return, § 111 — Telephones.*

2. A rate of return of 9.72 per cent which would result from rates and charges contained in a telephone company's application for a rate increase was considered excessive, p. 148.

*Return, § 111 — Telephones.*

3. A rate of return of approximately 6.50 per cent on net investment plus allowance for working capital was considered fair and reasonable to both a telephone utility and the public, p. 148.

APPEARANCES: A. P. Kitchin, Attorney for the Anson Telephone and Telegraph Company, Wadesboro, for the applicant;

For the Protestants: Walter E. Brock and R. E. Little, Attorneys at Law, Wadesboro, representing certain members of the Wadesboro Merchants Association and Chamber of Commerce.

By the COMMISSION: The above-entitled matter came on for hearing and was heard by the Commission on the 22nd day of May, 1950, on the petition filed by the Anson Telephone and Telegraph Company, Wadesboro, North Carolina, on the 27th day of February, 1950. Notice of the hearing was duly published and an affidavit to this effect was received in evidence in this proceeding.

In its petition for an increase in its exchange rates, the applicant contended that its earnings were insufficient to meet the general increase in cost of materials, wages, and other operating expenses. The applicant further showed that at the date of its incorporation, October 1, 1937, there were 501 company-owned telephone stations in service as compared with 1,517 stations in service at the present time, representing an increase of approximately 200 per cent.

During the same period of time, its gross operating revenues increased $44,091.54, or approximately 289 per cent; while its operating expenses increased $50,251.62, which was equivalent to an increase of approximately 400 per cent.

Applicant further represented that the rates and charges now in effect are the same as those which have been charged for the past twenty-five years.

The applicant further contended that the major factors contributing to the need for increased rates were the new minimum wage scale of 75 cents per hour under the Fair Labor Standards Act, as amended; the increased cost of materials used in its telephone business; the need for an experienced manager; and the continuation of its expansion program with respect to rural telephone service.

An examination by the Commission's accounting staff prior to the formal hearing date disclosed that the company's rate of return, after pro-forma adjustments to reflect throughout the period under examination additional expenses already incurred, or to be incurred in the immediate fu-

ture, was 4.40 per cent on its net investment during the period.

The accounting staff's examination also revealed that after the reflection of additional revenues which would be derived from the applicant's proposed rates, the rate of return would become 9.72 per cent on net investment during the period.

[1, 2] It is apparent to the Commission that the rate of return of 4.40 per cent derived from present rates and charges does not constitute a fair and reasonable rate of return. On the other hand, it appears to the Commission that a rate of return of 9.72 per cent, which would result from approval of the rates and charges as set forth in the application, would constitute more than a fair and reasonable rate of return to be extracted from the public.

[3] After giving mature consideration to the record in this proceeding and to the results of the accounting staff's examination as set forth in the report which was made a part of the record, the Commission is of the opinion that a rate of return of approximately 6.50 per cent on the applicant's net investment, plus allowance for working capital, constitutes a fair and reasonable rate of return to both the applicant and the public.

It is estimated that the rates and charges proposed by the applicant in its petition would produce additional gross revenues in the approximate amount of $11,344.

The Commission, having heretofore found that a rate of return of approximately 6.50 per cent on the applicant's net investment, plus an allowance for working capital, constitutes a fair and reasonable rate of return, now finds that additional gross revenues in the amount of $4,500 are needed to produce such a rate of return.

In view of the above, therefore,

It is *ordered,* that the Anson Telephone and Telegraph Company prepare and submit to the Commission for approval revised rate schedules which will produce additional annual gross revenues in the amount of $4,500.

It is *further ordered,* that said revised rates and charges become effective immediately following Commission approval thereof.

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*WISCONSIN PUBLIC SERVICE COMMISSION*

# Re Wisconsin Telephone Company

2-U-2292
September 29, 1950

APPLICATION *for authority to revise rates for telephone service to hotels; granted. For earlier decision, see (1949) 80 PUR NS 482.*

*Discrimination, § 167 — Telephone rates — Concessions to hotels.*

1. Telephone companies should not be required to underwrite the cost of

operating the telephone department of a hotel by granting rate concessions, p. 150.

*Rates, § 568 — Telephones — Service to hotels.*

2. A telephone company is entitled to compensation for the use of all facilities used in rendering service to hotels, and rates should be designed to cover such costs, p. 150.

*Rates, § 585 — Telephone toll service — Commission on hotel calls.*

3. Telephone companies paying hotels 15 per cent of interstate toll revenues originated by the hotel should apply the same rate of commission to intrastate toll calls, p. 151.

*Rates, § 568 — Telephone service — Hotels.*

4. Rates charged hotel guests for incoming and outgoing telephone service should be sufficient to compensate the hotel for its cost of providing such service, p. 151.

*Rates, § 585 — Hotel telephone service — Service charges.*

5. No service charges applicable to intrastate telephone toll calls originated by hotels should be authorized, p. 154.

By the COMMISSION: The Commission in an order dated July 18, 1949, 80 PUR NS 482, 512, in the above-entitled docket retained jurisdiction "to permit the filing of revised rates for service furnished to and by hotels served by Wisconsin Telephone Company after the presentation of evidence by the interested parties."

On September 8, 1949, the Commission received a request from the Wisconsin Telephone Company by its attorneys as follows:

"Wisconsin Telephone Company respectfully requests authority to put into effect the rates which it has proposed for service to hotels at its respective exchanges.

"In conformity with the order above referred to, the company requests that a hearing be set for the purpose of hearing the evidence of the parties on this subject."

APPEARANCES: Wisconsin Telephone Company, by John A. Anderson, Attorney, and Francis J. Hart, General Counsel, Milwaukee.

In opposition: Wisconsin Hotel Association, by Irving A. Lore, Attorney, Milwaukee; P. H. Porter, Attorney, Madison; Schroeder Hotel Company, by Irving A. Lore, Attorney, Milwaukee.

Of the Commission staff: H. J. O'Leary, rates and research department, and K. J. Jackson, rates and research department.

Briefs were submitted by John A. Anderson and Francis J. Hart for the applicant and Irving A. Lore and P. H. Porter for the Wisconsin Hotel Association.

There appear to be two matters to be determined by the Commission:

(1) The establishment of a reasonable schedule of rates for service and equipment furnished by the telephone company to hotels.

(2) The establishment of reasonable charges which the hotels may collect from their guests for use of telephone service in the hotel.

Present rates applicable to hotel service are set forth in Exhibit 2H.

There are three schedules. One schedule applicable to Milwaukee alone provides for the payment by the hotels of 2½ cents for each local message and 30 cents per month for each station connected to the hotel switchboard. There is no charge for switchboards or for trunks. Another schedule applicable at 39 exchanges of the company requires the hotel to pay 5 cents per local message up to a guaranty equal to the one-party business rate per trunk and 2½ cents for messages in excess of the guaranty. Switchboard charges range from $12 to $30 per month depending on capacity and the station rate with but minor exception is 50 cents per month. The remaining schedule applicable at 49 exchanges of the company requires the hotel to pay 2½ cents for all local calls and guarantee revenue per trunk equal to the one-party business rate. In this group a switchboard charge of $6 per month regardless of capacity is applicable, and stations with but minor exceptions are charged for at 50 cents per month.

The rates which the company proposes to apply are set forth in Exhibit 3H. They provide that the hotels pay standard rates for switchboards—the same rates that are paid by other customers who use switchboards. Local messages would be charged for at 4 cents each with no charge for trunks and no trunk guaranty. A charge of 75 cents per month would be made for stations except in cases where the hotels own the inside wiring, where an allowance of 10 cents per month per station would be made.

[1, 2] The company takes the position that the service and equipment furnished hotels is not different from that furnished other commercial private branch exchange subscribers and that like charges for like service should apply.

The Wisconsin Hotel Association does not concede the reasonableness of any increase in switchboard rentals nor any increase in station rentals beyond 5 cents per month. However, the hotels desire to pass on their full cost of rendering public telephone service to their guests through increases in local message charges and establishment of service charges on intrastate toll messages. If concessions in the form of lower rates for switchboards and stations are allowed they claim that the maximum increase that should be allowed is as follows:

(1) The establishment of switchboard rentals at Milwaukee at 50 per cent of the standard rate.

(2) Increases in switchboard at other points at 50 per cent of the company's proposals.

(3) Increases in station rentals of 10 cents per month per station.

(4) Increase in local message charges from 2½ cents to 4 cents.

The hotel association claims that hotels are entitled to preferential rates. The contention is based upon orders issued by the Commission following the decision of the Wisconsin supreme court in the case of Hotel Pfister v. Wisconsin Teleph. Co. (1930) 203 Wis 20, PUR1931A 489, 233 NW 617, 73 ALR 1190. The association calls attention to the following concepts and principles set forth in Commission orders subsequent to the Pfister Case.

(1) There are "certain rather marked and distinguishing characteristics, which clearly separate hotel

telephone service from other classes of service." ([1932] 3 Wis PSC 204, 213, PUR1933C 479, 485.)

(2) "The hotel is more than a mere agent of a utility . . . the hotel is both an agent and a patron of the utility. In its capacity as a patron, the hotel buys telephone service from the utility, and a portion of this service it sells to the public in its capacity as agent of the utility." (3 Wis PSC at p. 208, PUR1933C at pp. 481, 482.)

(3) ". . . . the private system within the hotels is but an extension of the telephone company's system as far as the former is used to furnish telephone service to the public in connection with the latter." ([1910] 5 Wis RCR 678, 690.)

As the Commission understands the position of the association, rates for service to hotels should cover the difference between what the hotel collects from its gusets in telephone charges and the total cost of rendering telephone service. The justification for this position is that the Commission has considered the hotel as the agent of the telephone company and that the agent should not be required to furnish telephone service at a loss.

The Commission is not convinced that the telephone company should be required to underwrite the cost of operating the telephone department of a hotel in the form of concession rates. Nor is it convinced that the hotel should be considered the same as any other commercial private branch exchange subscriber. The telephone company is entitled to compensation for the use of all facilities used in rendering hotel service and reasonable rates should be designed to cover such costs.

**[3, 4]** Present rate schedules of the company on file with the Commission provide that in connection with hotel semipublic branch exchange service in cities of the first class (Milwaukee) an optional local message charge is applicable. Hotels that cater primarily to transient guests, maintain a switchboard with 24-hour service and an outside extension telephone in each guest room, and allow the charging of rates for telephone service to open account have the option of charging 5 cents or 10 cents for each local message. Milwaukee hotels that cannot meet the qualifications indicated above can charge only 5 cents for each local message. The local message charge at all exchanges other than Milwaukee is 5 cents per call. The schedules also provide that the telephone company will pay the hotel 10 per cent of intrastate toll revenue originated by the hotel with a maximum of 10 cents on any one message. It is the Commission's understanding that the telephone company pays all hotels 15 per cent of interstate toll revenues originated by the hotel. The Commission is of the opinion that the same rate of commission should be applied to intrastate toll calls, and it will be so provided in the order.

The above schedule of local message charges was designed to compensate the hotel for the cost of providing guests with incoming and outgoing telephone service. The Commission in the past has taken the position that the hotel guest should be charged rates that compensate the hotel for its cost of providing incoming and outgoing service. The Commission considers this principle to be sound.

The hotel telephone system has these principal functions: (1) To pro-

vide the hotel as a subscriber with telephone service for its own purposes, (2) to provide an internal intercommunicating system between the guest and the hotel and among guests, and (3) to provide the guest with incoming and outgoing service to the public. All of the costs of maintaining and operating a telephone system within a hotel are joint costs and must be apportioned therefore between "guest" and "management" functions. It is therefore necessary to determine the total cost to the hotel of maintaining and operating the telephone system and then apportion this cost as between "guest" and "management."

A study has been made by the hotel association at eight hotels in the state of the cost of maintaining and operating the telephone system in the hotel. The telephone company has made a study of the distribution of calls and work units between management and guest telephones for the same hotels. These data make it possible to apportion costs between "guests" and "management." Regardless of the basis of apportionment of costs—and there are differences between the company and the association as to the reasonableness of methods used—the data can be used to show a variety of results. The Commission is in agreement with the company that the data submitted by the association is confusing and complicated in form and cannot be revised to segregate calls placed by "guest" and "management." The company has proposed a method of apportionment in which most of the data furnished by the association can be used. With a further revision in the method proposed it would appear that reasonable estimates can be made. Such estimates are shown on following page in Table I:

All of the costs of furnishing telephone service as computed by the association are included in Table I except the estimate of rental of facilities (switchboards and stations). The method as used in Table I was considered more accurate than the method used by the association. Although all items of cost as computed by the association have been included, the Commission considers that some of the items could be eliminated and the level of others reduced. The costs as computed in Table I appear to be maximum costs.

As previously stated the data covering the hotel in Table I can be used to show a variety of results. Based on present rates, two hotels show a profit and six show a loss. The total of all hotels would show a profit because of the high level of profit at the Schroeder Hotel. It can reasonably be assumed that under present rates, Milwaukee hotels that charge 10 cents per call recover their costs of guest service and show a profit. On the other hand, hotels in Milwaukee and out in the state that operate with a 5-cent local message rate show a loss on their guest service. If rates were increased to the level proposed by the company, all hotels except the Schroeder would show a substantial loss on their guest service. Because of its size and volume of business, it is apparent that the Schroeder Hotel is not representative of the typical hotel. In view of this situation it should be eliminated from consideration in determining the level of local message charges.

The association takes the position that "a (local) message charge to be

TABLE I

( ) Denotes red figures
(1) 5% of line 4

| | Schroeder Hotel Milwaukee | Medford Hotel Milwaukee | Shorecrest Hotel Milwaukee | Loraine Hotel Madison | Eau Claire Hotel Eau Claire | Raulf Hotel Oshkosh | Avalon Hotel Waukesha | Beaumont Hotel Green Bay |
|---|---|---|---|---|---|---|---|---|
| 1. Average monthly local message usage as | | | | | | | | |
| 2. shown in Ex. 1H extended to an annual basis | 292,788 | 55,848 | 59,208 | 60,360 | 25,572 | 11,400 | 4,488 | 9,504 |
| 3. Annual guest local message usage | | | | | | | | |
| 4. Ex. 7H amended | 246,703 | 47,208 | 48,278 | 59,111 | 22,005 | 10,681 | 4,094 | 8,633 |
| 5. Revenue to Hotel | | | | | | | | |
| 6. Local messages 10% of line 4 | $24.670 | $4,721 | (1) 2,414 | (1) 2,956 | (1) 1,100 | (1) 534 | (1) 205 | (1) 432 |
| 7. Commissions on toll messages Ex. 10H | 9,357 | 1,102 | 177 | 2,599 | 1,211 | 719 | 259 | 558 |
| 8. Total revenue | $34,027 | $5,823 | $2,591 | $5,555 | $2,311 | $1,253 | $464 | $990 |
| 9. Expenses to Hotel | | | | | | | | |
| 10. Rental of facilities (Present rates applied | | | | | | | | |
| 11. to facilities shown in Ex. 1H) | $3,085 | $1,181 | $608 | $2,364 | $1,092 | $1,134 | $546 | $1,416 |
| 12. Operators salaries and wages Ex. 10H | 21,551 | 5,906 | 3,014 | 8,550 | 4,992 | 2,477 | 2,379 | 3,657 |
| 13. Social security taxes and insurance Ex. 10H | 542 | 177 | 69 | 211 | 150 | 73 | 82 | 103 |
| 14. Miscellaneous expense Ex. 10H | 21 | 36 | 26 | (1) | 1 | — | — | (66) |
| 15. Interest, depreciation taxes, and insurance | | | | | | | | |
| 16. on inside wiring owned by hotel Ex. 10 H | 704 | 189 | 114 | 403 | 125 | 107 | 53 | 12 |
| 17. Printing and stationery Ex. 10H | 803 | 16 | 12 | 28 | 11 | 21 | 8 | 17 |
| 18. Rental value of space occupied by | | | | | | | | |
| 19. Switchboard Ex. 10H | 3,723 | 600 | 300 | 900 | 420 | 420 | 420 | 300 |
| 20. Management and administration salaries Ex. 10H | 1,881 | 485 | 273 | 1,170 | 871 | 286 | 206 | 546 |
| 21. Advertising Ex. 10H | 1,746 | 50 | — | 236 | 117 | 111 | 49 | 49 |
| 22. Reserve for bad debts Ex. 10H | 222 | 39 | 6 | 12 | 13 | 3 | 3 | 12 |
| 23. Total expenses | $34,278 | $8,679 | $4,422 | $13,873 | $7,792 | $4,632 | $3,746 | $6,046 |
| 24. Guest portions of above expenses, ratio of guest outgoing and incoming call | | | | | | | | |
| 25. Work units to total work units at switchboard | | | | | | | | |
| 26. Ex. 7H amended | 47.85% | 51.65% | 55.21% | 40.94% | 52.08% | 49.31% | 36.77% | 38.46% |
| 27. Amount % line 26 of line 23 | $16,402 | $4,483 | $2,441 | $5,680 | $4,058 | $2,284 | $1,377 | $2,325 |
| 28. Local messages 2½ cents per guest mag. | 6,168 | 1,180 | 1,207 | 1,478 | 550 | 492 | 104 | 504 |
| 29. Total guest service expense line 27 and 28 | $22,570 | $5,663 | $3,648 | $7,158 | $4,608 | $2,776 | $1,481 | $2,829 |
| 30. Profit or loss guest service line 8–line 29 | $11,457 | $160 | $1,057 | $(1,603) | $(2,297) | $(1,523) | $(1,017) | $(1,839) |
| 31. Proposed increase in rates | | | | | | | | |
| 32. Equipment | $6,299 | $1,978 | $1,310 | $1,075 | $487 | $500 | $263 | $366 |
| 33. Local messages | 4,393 | 838 | 888 | 906 | 384 | (69) | 66 | (175) |
| 34. Total | $10,692 | $2,816 | $2,198 | $1,981 | $871 | $431 | $329 | $191 |
| 35. Amount chargeable to guest service | $6,715 | $1,730 | $1,447 | $1,327 | $584 | $182 | $157 | $(18) |
| 36. Profit or loss guest service after proposed | | | | | | | | |
| 37. rate increase line 30–line 35 | $4,742 | $(1,570) | $(2,504) | $(2,930) | $(2,881) | $(1,705) | $(1,174) | $(1,821) |

reasonable and hold the traffic must not exceed 15 cents at Milwaukee and 10 cents at other cities in the state." In addition the association proposes a service charge graduated from 10 to 25 cents on outgoing toll calls. In order to hold the traffic the association has in mind the fact that guests can use the public telephone facilities in the lobby of the hotel where a 5-cent local message charge is applicable.

Following is the effect of the application of a 15-cent local message charge in Milwaukee and a 10-cent charge at other cities in the state as applied to the 8 hotels shown in Table I:

| Milwaukee Hotels | Present Revenue From Guest Service | Cost of Guest Service Present Rates | Profit or Loss | Increased Cost of Service Proposed Rates | Added Revenue from Increased Rate per Call | Profit or Loss |
|---|---|---|---|---|---|---|
| Schroeder | $34,027 | $22,570 | $11,457 | $6,715 | $12,335 | $17,077 |
| Medford | 5,823 | 5,663 | 160 | 1,730 | 2,360 | 790 |
| Shorecrest | 2,591 | 3,648 | (1,057) | 1,447 | 4,828 | 2,324 |
| State Hotels | | | | | | |
| Loraine | $5,555 | $7,158 | $(1,603) | $1,327 | $2,956 | $26 |
| Eau Claire | 2,311 | 4,608 | (2,297) | 584 | 1,100 | (1,781) |
| Raulf | 1,253 | 2,776 | (1,523) | 182 | 534 | (1,171) |
| Avalon | 464 | 1,481 | (1,017) | 157 | 205 | ( 969) |
| Beaumont | 990 | 2,829 | (1,839) | (18) | 432 | (1,389) |

( ) Denotes red figure.

[5] A rate of 15 cents per local message in Milwaukee would be excessive. A rate of 12 cents would result in a profit of $9,676 at the Schroeder, $875 at the Shorecrest, and a loss of $626 at the Medford. This level of rate for Milwaukee appears reasonable. It is to be noted that four of the five hotels outside Milwaukee will operate guest service at a loss under a 10-cent local message rate. As previously stated, the association is of the opinion that this is the maximum rate that the traffic will bear. The hotels outside Milwaukee with a 10-cent rate would collect revenues materially in excess of the increase in rates proposed by the company. Consistent with previous practice, no service charges applicable to intrastate toll calls will be authorized. However, the hotels will obtain additional revenues from the increase in commissions on such calls authorized herein.

The Commission finds:

1. That the present schedule of hotel rates of Wisconsin Telephone Company is unreasonable because of inadequacy.

2. That a reasonable schedule of rates for service, facilities, and equipment furnished to hotels is that proposed by Wisconsin Telephone Company.

3. That a local message rate of 12 cents applicable to hotel service at Milwaukee and 10 cents outside Milwaukee is just and reasonable.

The Commission concludes:

That an order should be issued in accordance with the foregoing findings of fact.

# Re Bangor Municipal Authority

Application Docket No. 70592
September 11, 1950

PETITION *of borough and township for order requiring municipal authority to show cause why a certificate authorizing it to acquire stock, notes, properties, and franchises of a water company should not be rescinded; dismissed for lack of jurisdiction.*

*Appeal and review, § 72 — Proceedings pending appeal — Operating authority.* The Commission has no jurisdiction to alter, amend, or rescind a certificate of convenience and necessity which it has issued when the Commission order is the subject of an appeal in which the record is already before the superior court and, consequently, it has no jurisdiction to entertain any petition affecting the certificate.

By the COMMISSION: This matter is before us upon petition of the borough of Roseto and township of Washington, praying the Commission to issue a rule to show cause why the certificate of public convenience, issued at A. 70592 and which authorized Bangor Municipal Authority to acquire all of the outstanding common stock and demand notes of The Bangor Water Company and the acquisition thereby of the properties, assets, and franchises of said company, should not be rescinded. Answer to the petition was filed by Pennsylvania State Water Corporation.

The certificate of public convenience referred to in the petition and the Commission record relating thereto is now before the Pennsylvania superior court on appeal of the borough of Roseto and township of Washington v. Public Utility Commission and Bangor Municipal Authority, at No. 4 October term, 1950.

In view of the fact that the record in this proceeding is now before the Pennsylvania superior court, this Commission, pending disposition of the appeal, has no jurisdiction to alter, amend, or rescind the certificate of public convenience which is the subject of the appeal.

Under the circumstances the petition here considered must be dismissed; therefore,

It is *ordered:* That the petition of the borough of Roseto and township of Washington for a rule to show cause why the certificate of public convenience issued to Bangor Municipal Authority at A. 70592 should not be rescinded is dismissed.

# Re Robert L. Steele

Docket No. 3827, Order No. 2199
September 5, 1950

INVESTIGATION *on Commission motion to determine public utility status of water service furnished by tract owners to purchasers of lots, wherein tract owners move to dismiss proceedings for lack of jurisdiction; motion granted.*

*Public utilities, § 11 — Power to determine utility status.*

1. The Commission has jurisdiction to determine the public utility status of the owners of a real estate subdivision furnishing water service to purchasers of lots, p. 157.

*Public utilities, § 16 — Test of status — Dedication to public service.*

2. A holding out or dedication of property to public utility service is necessary before any business becomes a public utility, although such a dedication may be inferred from actions regardless of stated intentions, p. 158.

*Public utilities, § 122 — Status of water supply — Service by tract owner.*

3. Owners of a real estate subdivision, supplying water to purchasers of lots, under contract and only as an accommodation, do not constitute a public utility subject to Commission jurisdiction where the tract owners, obtaining the water from a supply developed for themselves, have not held themselves out to furnish utility service and there has been no dedication of the property to utility service, p. 158.

By the COMMISSION: The above-entitled matter came on regularly to be heard in the courtroom of the courthouse in the city of Kalispell, Montana, at the hour of 10 o'clock A.M., on the 23rd day of August, 1950.

APPEARANCES: Moncure Cockrell, Kalispell, appearing for Archie Steele and Robert L. Steele.

Protestants: William D. Boettcher, Kalispell, appearing for Ralph McClintock and Lucille McClintock.

OTHER APPEARANCES: Edwin S. Booth, Secretary-counsel, appearing for the Board.

By the COMMISSION: Robert L. Steele or Archie Steele have been furnishing water to an area known as Columbia Heights near Columbia Falls, Montana. Question arose as to whether their service constituted a public utility under the jurisdiction of this Commission. The Commission on its own motion set a hearing for the purpose of determining whether the operation was that of a utility.

At the time of hearing the respondents Archie Steele and Robert L. Steele appeared specially by counsel and moved to dismiss the proceedings on the grounds that they are not a util-



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ity as to their well, equipment, and water supplied therefrom and upon the further grounds that the Commission is without jurisdiction to determine whether the parties are a public utility, that being a judicial question which has never been determined by a judicial body or a court of competent jurisdiction.

[1] This motion was based on the premise that § 70–104 R.C.M., 1947, prohibits the Commission from exercising judicial powers. This section reads as follows:

"70–104. (3882) *Power to prescribe rules of procedure—judicial power.* In addition to the modes of procedure hereinafter prescribed in particular cases and classes of cases, said Commission shall have power to prescribe rules of procedure, and to do all things necessary and convenient in the exercise of the powers by this act conferred upon the Commission; provided, that nothing in this act shall be construed as vesting judicial powers on said Commission, or as denying to any person, firm, association, corporation, municipality, county, town, or village the right to test, in a court of competent jurisdiction, the legality or reasonableness of any fixed order made by the Commission in the exercise of its duties or powers."

Counsel also relies on the case of State ex rel. Public Service Commission v. District Court (1938) 107 Mont 240, 26 PUR NS 404, 84 P2d 335, where the Montana court held that the determination of water rights held by a utility was a judicial question and beyond the jurisdiction of the Commission.

Reading of the Public Service Act, including § 70–104 quoted above, shows that the Commission is given the duty and jurisdiction of regulating utilities. This includes the making of rules, fixing of rates, and other matters which include fact-finding determinations. The provisions of § 70–104 provide that the Commission may not exercise judicial power or deny any party the right to test the legality or reasonableness of orders in the court.

This Commission in the case of Public Service Commission v. Valley Mercantile Co. decided in 1921, and reported in PUR1921D 803, 805, 806, held that it had jurisdiction to determine whether a service was a public utility. The Commission said:

"We think it clear from the foregoing that this Commission has the power to determine, in limine, the existence or extent of its jurisdiction or authority, i.e., whether given facts bring its powers into play notwithstanding that the process involves judicial action or inquiry in the sense that the existence or nonexistence of our power is found, by the exercise of judgment on given facts. That which is prohibited to us is 'judicial power,' the enforcement of liabilities on present or past facts discovered by judicial inquiry in law or equity, not the preliminary of 'judicial inquiry' which ascertains facts and announces conclusions administratively but stops short of enforcement. On principle, this must be conceded if we are to function at all. The Commission is the creature of statute. For its every official act authority must be found in the statute, requiring daily consultation of its terms—daily trial of facts against its mandates. Undoubtedly this partakes of the nature of judicial power (Mer-

rill v. Sherburne [1818] 1 NH 199, 8 Am Dec 52) but if, for that reason, it is denied us, we are incompetent. To push the denial of judicial power to its drily logical extreme is for the judicial to destroy the legislative function, for most legislative action is preceded by hearings and investigations quasi judicial. Prentis v. Atlantic Coast Line Co. (1908) 211 US 210, 53 L ed 150, 29 S Ct 67. That other statutes, city ordinances and the Constitution itself may be among the facts whereon our judgment must be applied makes no difference in principle. If we could not give the Constitution effect because its application or interpretation involved the judicial power, we would have difficulty in honoring the oath of office. Without more, it is enough to observe that the legislative and executive branches daily indulge in judicial action without thought of successful challenge on the ground that the rightful function of the judiciary is being trespassed upon."

The Commission overruled the motion to dismiss and proceeded to determine the facts available which are pertinent to the matters in issue.

**[2, 3]** The respondents submitted an affidavit signed by eight persons. These persons all receive water from the Steele well and are all of the persons supplied with the exception of two parties who were not available. This affidavit and the attached contract show that Robert Steele owned some property at Columbia Heights, he had it platted and sold lots. Steele dug a well for his own use and under separate agreements provided that he would furnish water from the well as an accommodation to those who bought lots. Under the contract the parties paid certain initial amounts and certain monthly payments. These payments were to partially defray the expense of operation of the system. Each of them state that they understand Steele is not operating a utility and is not obligated to continue service or to furnish water. They understand that the furnishing of water is merely an accommodation. The contract with the parties carries provision in accord with this understanding. From the testimony it appears that Steele has never maintained an office for the water business, has never solicited any patrons, and has furnished water to those who bought lots from him as an accommodation only. Steele retains several lots and has drilled the well for his own use at a cost of $8,000. They have a pressure tank and have installed ¾-inch lines to the various lots.

When Steele first started selling lots it was believed that they would be able to obtain water from another well and some of the lots were sold with the understanding that water would be piped to the lots. This transaction was never completed and $75 figured as the cost of water was refunded from the price of the lots.

Mrs. McClintock testified that when they did not obtain water that a refund in the amount of $75 was made to them. Subsequently a water line was laid from Steele's well and water was furnished for four months in 1949, 1950. The service was discontinued when the pipes froze and were not repaired. The McClintocks paid $14 for the four months. They refused to sign the contract submitted by Steele which was the same as that signed by other persons. Mrs. Stevens testified that Steele offered to furnish water

to them for $100 advance payment and $5 per month. There was no evidence offered showing that Steele ever offered to furnish water to anyone other than under the purported contract. One party who has not signed the contract has been obtaining water but Steele has not collected any money for maintenance from this party because of that fact although Steele believes he should be reimbursed.

Section 70–103, R.C.M., 1947, reads as follows: "70–103. (3881) *'Public Utility' defined.* The term 'public utility,' within the meaning of this act, shall embrace every corporation, both public and private, company, individual, association of individuals, their lessees, trustees, or receivers appointed by any court whatsoever, that now or hereafter may own, operate, or control any plant or equipment, or any part of a plant or equipment, within the state, for the production, delivery, or furnishing for or to other persons, firms, associations, or corporations, private or municipal, heat, street railway service, light, power in any form or by any agency, water for business, manufacturing, household use, or sewerage service, whether within the limits of municipalities, towns, and villages, or elsewhere, telegraph or telephone service; and the Public Service Commission is hereby invested with full power of supervision, regulation, and control of such utilities, subject to the provisions of this act, and to the exclusion of the jurisdiction, regulation, and control of such utilities by any municipality, town, or village."

Before any business would become a utility there must be a holding out or dedication of the property to public utility service. Such a dedication may be inferred from actions of the party, irrespective of stated intentions. Public Service Commission v. Valley Mercantile Co. *supra.*

Under the evidence in this case, the respondents have specifically stated verbally and in contracts that the service furnished was an accommodation and that they did not assume the obligation of a utility. Their actions in furnishing water from a supply developed for themselves shows that the service is accommodation service and that they do not hold themselves out to furnish utility service. Under all the facts it appears that there has been no dedication of the property to utility service. The findings of the Board in this case are limited to the evidence presented at this time. If the facts should change, the action of the Board in future actions would be governed by such changed conditions.

From the evidence and for the reasons stated the Board finds that the operation of Archie Steele or Robert L. Steele in furnishing water is an accommodation to individuals making arrangements with them and that they have not dedicated their property to public utility use. The Board concludes as a matter of law that the proceeding should be dismissed.



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# Finfrock et al.

*v.*

# Public Utilities Commission

Nos. 32216, 32217
— Ohio St —, 93 NE2d 284
June 14, 1950

APPEALS *from final order of Commission dismissing complaints; appeals dismissed.*

*Appeal and review, § 79 — Time limitation — Final order.*

Notice of an appeal from a Commission order must, under the statute, be filed within sixty days after entry of the final order rather than an order overruling an application for rehearing.

APPEARANCES: Myers, Mills, Boesch & Cline Dayton, for Finfrock and others; Myers, Mills, Boesch & Cline, and Louis W. Makley, for Radcliffe Heights Area Association and others; Herbert S. Duffy, Attorney General, and Kenneth B. Johnston, Columbus, for appellee.

PER CURIAM: These causes are before this court on motions by appellee to dismiss the appeals filed herein from orders of the Public Utilities Commission. The notice of appeal in each case was not filed within sixty days from the date of the entry of the final order of the Commission dismissing the complaint but was filed within sixty days from the entry of the order overruling an application for rehearing.

Section 547, General Code, provides that "no proceeding to reverse, vacate, or modify a final order of the Commission shall be deemed commenced unless the notice of appeal is filed within sixty days after the entry of the final order complained of upon the journal of the Commission."

The "final order," as the term is used in that section is, in each of the instant cases, the order dismissing the complaint, against which the application for rehearing is directed, and is not the order overruling the application for rehearing.

The appeals not having perfected within the time required by statute, the motions to dismiss the appeals are sustained. Conway v. Public Utilities Commission (1938) 133 Ohio St 530, 14 NE2d 929.

Appeals dismissed.

Weygandt, CJ., and Matthias, Hart, and Turner, JJ., concur.

Zimmerman, J., not participating.



# Industrial Progress



*A digest of information on new construction by privately managed utilities; similar information relating to government owned utilities; news concerning products, supplies and services offered by manufacturers; also notices of changes in personnel.*

## Arkansas Power Plans To Increase Capacity

ARKANSAS POWER & LIGHT COMPANY recently announced it plans to double the capacity of its new Lake Catherine power plant near Hot Springs to about 200,000 kilowatts.

The $9,000,000 improvement program will be completed in about 22 months, according to C. Hamilton Moses, president.

## Wisconsin Electric to Start Operating New Unit in 1952

WISCONSIN ELECTRIC POWER COMPANY will start operation in December, 1952, of the first 120,000-kilowatt electric generating unit at its new $100,000,000 Lake Michigan plant, according to G. W. Van Derzee, president.

The new plant will be erected on a 412-acre tract in southeastern Milwaukee county and northeastern Racine county. Construction will get under way as soon as the Wisconsin Public Service Commission rules on the utility's petition for authority to install two 120,000-kilowatt generating units as the first step in the 10-year plant construction program.

Each of the two units will cost approximately $25,000,000, with the second unit scheduled for operation around mid-1954. Ultimate capacity of the plant will be 500,000 kilowatts.

## Ebasco Clients Hold Annual Safety Meeting

OVER one hundred safety, operating, and personnel executives of Ebasco client utility companies attended the 12th Annual Ebasco Safety Meeting, held in Chicago recently, in conjunction with the National Safety Congress. The keynote of the meeting was struck by H. H. Scaff, vice president of Ebasco Services Incorporated, who, in opening the sessions, emphasized the necessity of conserving manpower and money in the all-out defense preparations. He pointed to accident prevention as an important factor in this conservation program in addition to its humanitarian aspect.

In line with the present emergency, a part of the program was set aside for consideration of plant protection and defense measures of utility companies. Col. W. L. Furbershaw, vice chairman of Chicago's Civil Defense Plant Protection Committee, addressed the delegates on the physical and psychological weapons of enemy agents and saboteurs and detailed the procedures and precautions necessary for protection against them. Following Colonel Furbershaw's talk, practical defense plans of major utility companies were discussed in detail.

## Sollitt Construction Co. to Build Kanawha River Plant

AT ground-breaking ceremonies for the new $40,000,000 Kanawha river generating plant, Philip Sporn, president of the American Gas and Electric Company, and its operating company, the Appalachian Electric Power Company, recently announced that the Sollitt Construction Company of South Bend, Indiana, had been awarded the contract for construction of the plant buildings and structures.

The initial installation at Kanawha calls for two 200,000 kilowatt units with an ultimate capacity of a million kilowatts. These units will rank as the largest on the AG&E system and among the largest-sized generating units in the country. Completion of the first unit is scheduled for October, 1952, and the second unit for February, 1953. The 400,000 kilowatts being installed in this new plant is almost double the demands of all of the industries and other customers of the company in this great Kanawha valley.

## Automatic Products Company Now A-P Controls Corporation

THE AUTOMATIC PRODUCTS COMPANY of Milwaukee has announced a change in the name of its corporate title. The company will now be known as the A-P Controls Corporation.

According to E. A. Vallee, executive vice president of the corporation, the new name has been adopted to reflect more accurately the actual nature of the products manufactured.

The firm manufactures a wide variety of controls for gravity-fed oil burners and is the largest manufacturer of oil-level control valves for space heaters. Another division produces automatic and thermostatic expan-

(*Continued on page 26*)

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sion valves for refrigeration systems, as well as other refrigeration controls, including solenoid valves in all sizes, water regulating valves, constant pressure valves, strainers and dryers.

In addition, new types of controls for gas furnaces and heaters have recently been developed by the company, and these have found wide acceptance in the gas-heating industry.

Acquisition of a Canadian plant was recently announced, and this will be operated under the name of A-P Controls Corporation, Limited.

## R. B. McElroy Joins R. W. Beck & Associates

R. W. Beck, chief engineer of R. W. Beck and Associates, announced recently that R. B. McElroy joined his firm of public utility analysts and engineers as of November 1, 1950.

Mr. McElroy is a graduate electrical engineer of the State College of Washington, and for the past thirty years has been employed by the Washington Water Power Company. During the early years of his employment with that company, he was engaged on engineering phases of the operation of electric properties, and had advanced to the position of general sales manager of the company, which position he held for a number of years prior to joining the Beck organization.

R. W. Beck and Associates has three general offices located in Seattle, Washington; Colorado Springs, Colorado; and Columbus, Nebraska. In making the announcement, Mr. Beck stated that while Mr. McElroy will make his headquarters in the Columbus, Nebraska office, his services will be available to other offices of the firm and to all clients served by the organization.

## Georgia Power Starts Bartletts Ferry Project

Excavation has begun for the foundations for an enlarged powerhouse at the Bartletts Ferry hydroelectric project on the Chattahoochee river near Columbus, it was announced by C. B. McManus, president of the Georgia Power Company. A 20,000 kilowatt generator will be installed in the powerhouse increasing the capacity of this project from 45,000 to 65,000 kilowatts. This work will be done at a cost of nearly $1,500,000.

The actual construction of the powerhouse will be completed in April, 1951.

The Bartletts Ferry project is a part of the company's widespread expansion and building program. Other projects under way include a 40,000 kilowatt hydroelectric plant at Furman Shoals near Milledgeville, two additional 100,000 kilowatt steam-electric generating units at plant Yates near Newnan and a 40,000 kilowatt steam plant to be located in the Brunswick area.


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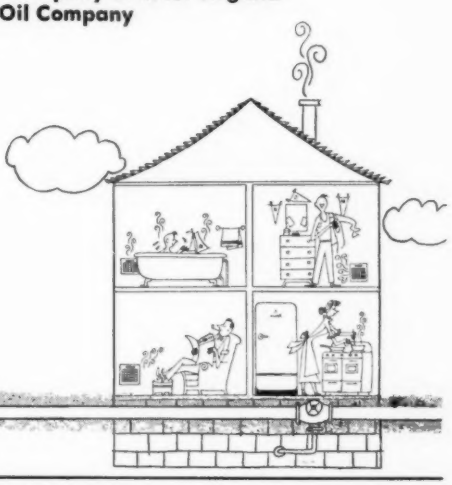
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## New Allis-Chalmers Switchgear Bulletin

ALLIS-CHALMERS indoor and outdoor switchgear for better protection and flexible control of power and distribution circuits is described in a new 20-page bulletin released by the company.

Copies of the bulletin, "Allis-Chalmers Switchgear," 18B6185A, are available upon request from Allis-Chalmers Manufacturing Company, 965 S. 70th street, Milwaukee, Wisconsin.

## Commonwealth Edison Opens Ridgeland Station

COMMONWEALTH EDISON COMPANY is formally opening its new Ridgeland generating station December 7th, according to Charles Y. Freeman, chairman.

In making the announcement, Mr. Freeman said that this is the first new station which has been added to the Commonwealth Edison system since 1929. Since that year the capacity of the system has increased nearly 70 per cent but all the expansion of generating plant in the intervening period consisted of additions to existing stations.

Ridgeland is beginning operation with one 150,000 kilowatt generating unit, capable of producing enough electricity to serve a city of more than 300,000 population. It is designed, however, for an ultimate capacity of 600,000 kilowatts. A second 150,000 kilowatt unit is already partly installed and will be completed in the summer of 1951, while a third unit has been ordered and is scheduled for service in 1953.

When the three units are completed, the 450,000 kilowatt capacity at Ridgeland will make it second in size only to Fisk station in Chicago which is now the largest of the Edison system. Fisk has a capacity of 464,000 kilowatts.

The new Ridgeland unit increases the capacity of the Edison system to 2,802,000 kilowatts.

*This advertisement is not an offer to sell or a solicitation of an offer to buy these securities. The offering is made only by the Prospectus.*

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November 28, 1950

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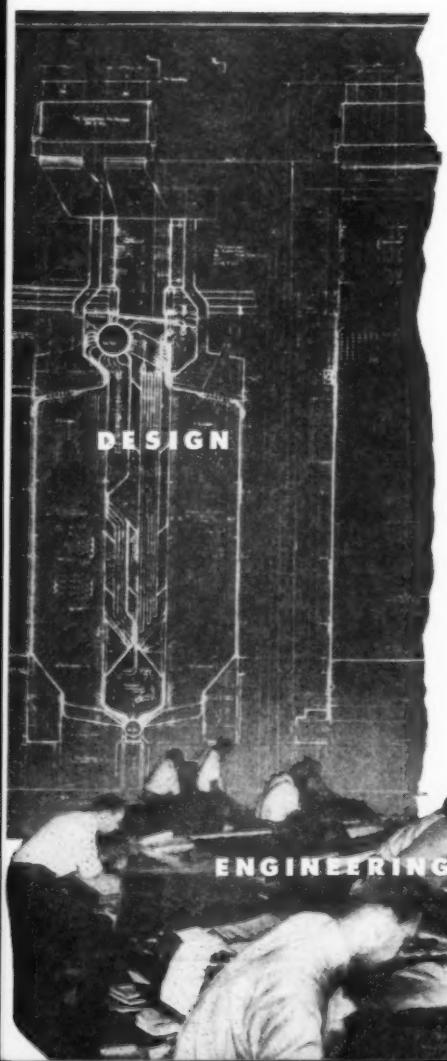
*Your key to greater hauling profits*

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# Milestones of engineering

The modern Foster Wheeler Steam Generator, heart of many of the most efficient central station and industrial power plants in America and elsewhere, reflects the engineering and productive ingenuity of an organization long recognized as a pioneer and innovator in the field of steam generation.

The story of Foster Wheeler achievement is best revealed by the following milestones of engineering progress:




**1898—Aero pulverizers** firing various fuels applied successfully on a commercial scale.

**1902—Superheated steam introduced** commercially in the United States.

**1904—Convection superheaters** standardized with cast iron, extended surface rings applied to steel tubes. Bare tubes later used with improved design technique and improved metal selection.

**1912—Air preheaters** of tubular type built and operated. Plate type heaters followed a few years later.

**1917—Water tube boilers** designed for production on a large scale—both oil and coal fired.

**1919—Economizers** of high pressure, extended surface, unit type introduced.

**1919—Radiant superheaters** developed after long research and experimentation.

*EXPERIENCE...*

*the priceless ingredient of*



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**1924—Water walls** and water backs applied to many types of furnaces burning various fuels.

**1934—Pulverized anthracite** burned in direct-fired system eliminating need for pulverized fuel storage.

**1935—Radiant reheaters and radiant superheaters** installed in one of the first large high pressure reheat units in the country.

**1936—Twin furnace steam generators** of the separately-fired superheater type (shown upper right) developed to give steam temperature control over load ranges up to 10 to 1.

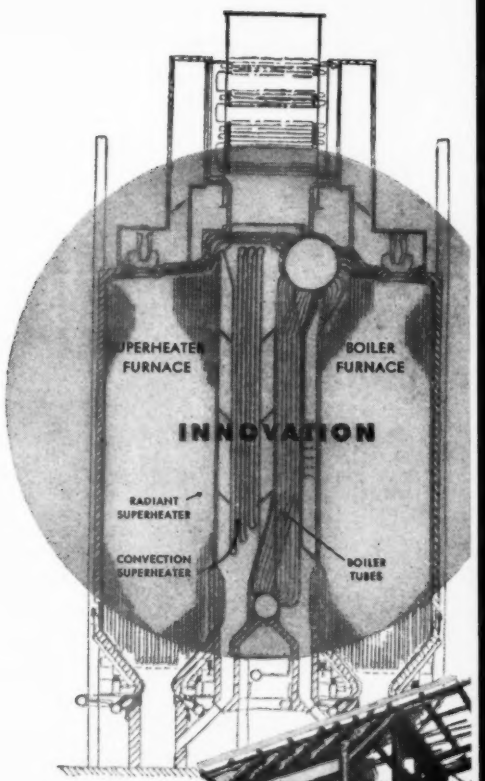
**1945—Dual circulation steam generator** introduced for operation in high pressure plants requiring up to 100 per cent make-up. The Dual Circulation principle achieves low total solids carry-over, especially silica, with minimum blowdown losses.

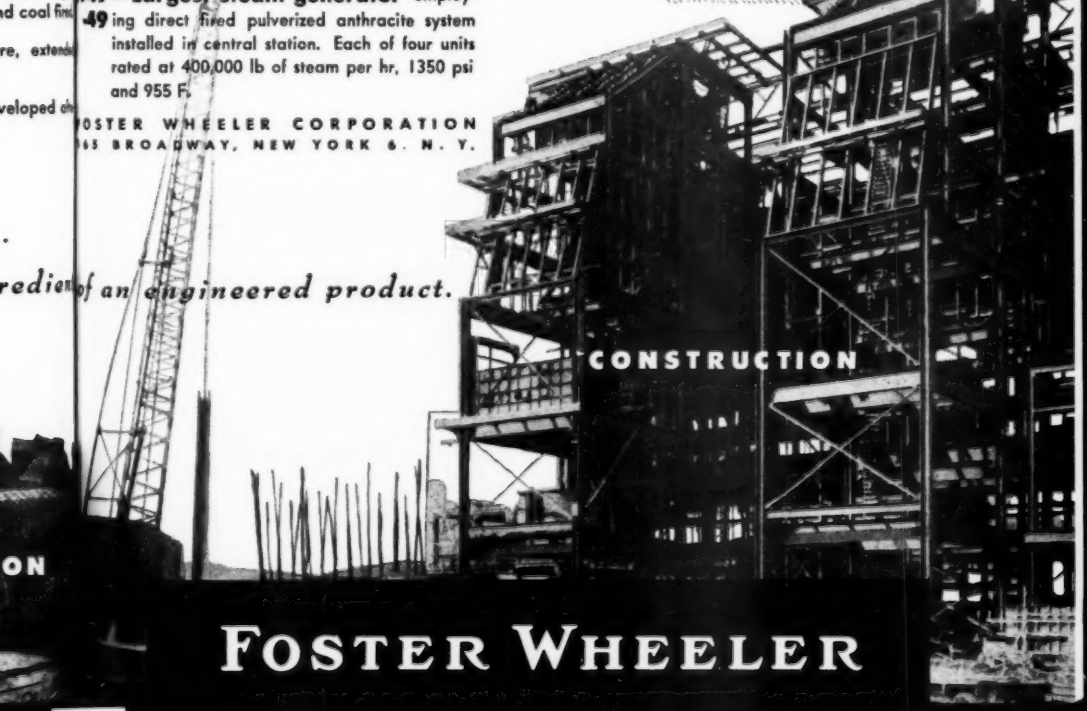
**1946—First large steam generator** installed in central station to operate over a wide load range at 1000 F final steam temperature.

**1947-49—Largest steam generator** employing direct fired pulverized anthracite system installed in central station. Each of four units rated at 400,000 lb of steam per hr, 1350 psi and 955 F.

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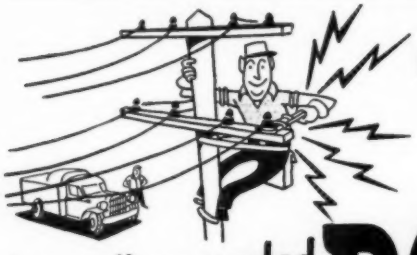
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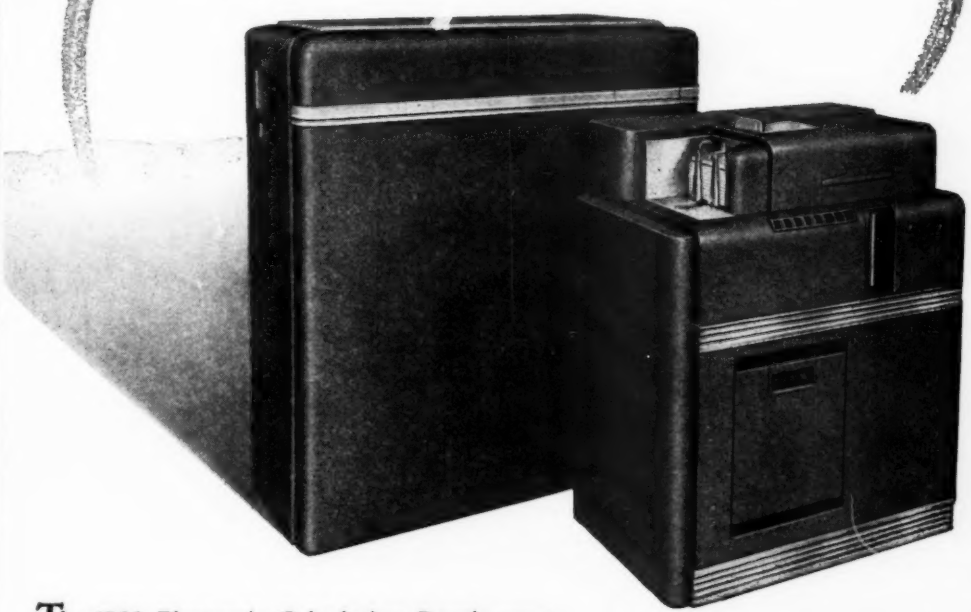


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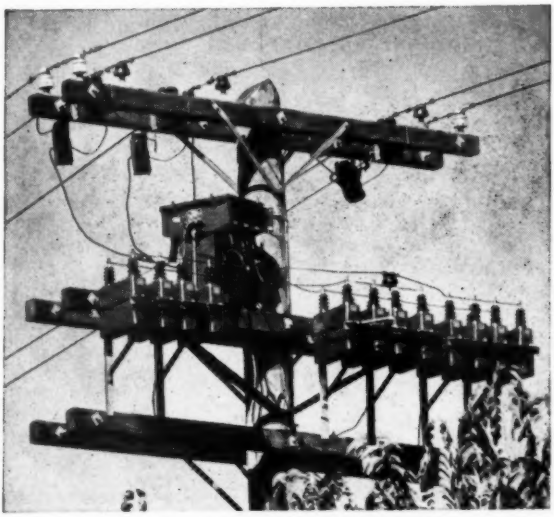
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# Capacitors profitable

## at rate of 1 kvar for each 286 ft. of feeder

**Indianapolis Power & Light Company raising power factor to near-unity by adding 180-kva pole-mounted capacitor banks, many of them with oil switches**



This is a current-controlled switched capacitor bank at Eastern and Sutherland Avenues in Indianapolis. An oil switch is mounted with the capacitors.

Indianapolis Power & Light Company is currently installing pole-mounted banks of capacitors out along their 4-kv feeders. At the end of their present program, they will have approximately 44,000 kvar in service—or one kvar for each 286 feet of overhead 4-kv line. This is in addition to capacitors installed on the 4-kv buses at some of the larger substations.

Here is another case of a utility that is getting more effective use from its distribution system—and consequently reducing invested cost per delivered kw-hr—by raising power factor to near-unity. Have you checked recently to see how much extra system capacity you have that can be released by installing permanently connected *or switched* capacitors?

*Apparatus Department, General Electric Company, Schenectady 5, New York.*

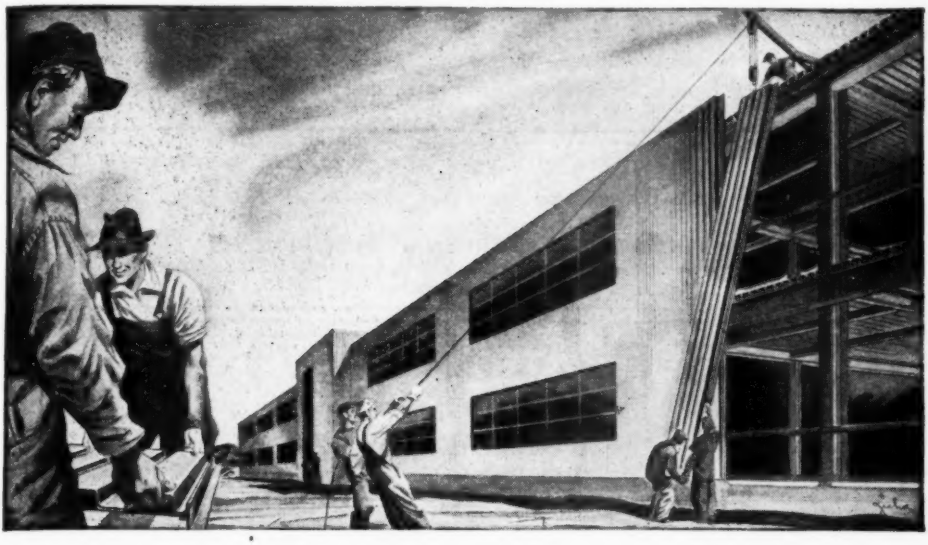
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what we really make is time!



## it's faster to hang a wall than to pile it up...

Little blocks, say 2" x 4" x 8", don't pile up very fast.

We hang walls up in sizable panels.

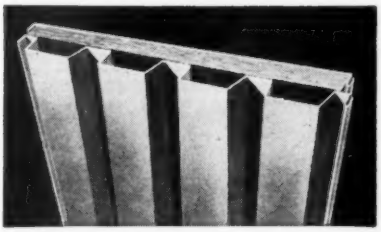
And that is an easy way to understand why Robertson's real product is *time*.

We make walls that are hung in place. We make them complete with insulation when the panels are delivered. We engineer them piece by piece in advance at the factory. We put expert crews on the job to place them.

We make time, now, when time is the essence.

We save days and weeks in finishing a building for *use*, because years have been put into the development of these unique skills.

*Quick* is the word we practice.



Q-Panels are fabricated from Galbestos, aluminum, stainless steel, galvanized and black steel in lengths up to 25'.

Q-Panels, 3" in depth with 1⅛" of incombustible insulation, have a thermal insulation value superior to that of a 12" dry masonry wall with furred plaster interior. A single Q-Panel with an area of 50 sq. ft. can be erected in nine minutes with a crew of only five men, and twenty-five workmen have erected as much as an acre of wall in three days.

Q-Panel construction is quick, dry, clean, and offers an interesting medium of architectural expression.

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# There's a lot of MILEAGE in a ton of coal



*Photo by Eugene Friduss taken at Aberdeen Proving Ground.*

Supplying both the civilian and military needs of this "nation on wheels" calls for the staggering total of 76 million tires a year! And they range from "pint-size" tires for your automobile to huge, heavy-treaded shoes for the tank-hauling Army truck in this photograph.

Making all this tough, long-wearing rubber—both synthetic and natural—takes plenty of low-cost heat and power. And most of that heat and power is produced from coal. Tire manufacture alone will take almost two million tons of coal this year.

The rubber industry and other vital defense industries, such as steel, railroads, chemicals and public utilities, need and get coals of particular kinds and grades. To supply them—and all coal customers—with a constantly improved product, the nation's progressive coal operators have built huge, modern coal preparation plants. The result? Increasingly *more* heat and *more* power from each ton of coal!

Yes, when it comes to meeting today's demands for fuel, coal is in a class by itself. For, alone among fuels, coal is available in virtually limitless quantities. And, thanks to enormous investments in new mine properties, research and mechanized equipment, the coal industry is better prepared right now than at any time in history to meet the increased demands of national defense!

**Business-managed coal companies, using private capital in the time-tested American way, have brought this country's coal industry to the highest peak of productive capacity the world has ever seen. Granted a continuing supply of essential equipment, transportation, and the full use of its trained, skilled man power, the industry will produce all the coal the nation may need—in peace . . . or in war.**

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